

LIVES OF EMINENT AMERICAN
PHYSICIANS AND SURGEONS
OF THE NINETEENTH
CENTURY



SAMUEL D. GROSS

KESSINGER LEGACY REPRINTS

LIVES

OF

EMINENT AMERICAN

PHYSICIANS AND SURGEONS

OF THE

Nineteenth Century.

EDITED BY

SAMUEL D. GROSS, M.D.,

PROFESSOR OF SURGERY IN THE JEFFERSON MEDICAL COLLEGE
OF PHILADELPHIA.

PHILADELPHIA:

LINDSAY & BLAKISTON.

1861.

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LIST OF CONTRIBUTORS.

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| <p>BELL, JOHN, M.D.,
Philadelphia: Formerly Professor of Medicine in the Medical College of Ohio.</p> <p>BIDDLE, J. B., M.D.,
Formerly Professor of Materia Medica in the Pennsylvania College, Philadelphia.</p> <p>BROWN, BUCKMINSTER, M.D.,
Boston.</p> <p>DAVIS, N. S., M.D.,
Professor of Medicine in Lind University, Chicago.</p> <p>DICKSON, SAMUEL H., M.D., LL.D.,
Professor of Medicine in the Jefferson Medical College, Philadelphia.</p> <p>DONALDSON, FRANK, M.D.,
Professor of Materia Medica in the Maryland College of Pharmacy, Baltimore.</p> <p>FLINT, AUSTIN, M.D.,
Professor of Clinical Medicine in the New Orleans School of Medicine.</p> <p>FRANCIS, JOHN W., M.D., LL.D.,
New York.</p> <p>GILMAN, C. R., M.D.,
Professor of Midwifery, College of Physicians and Surgeons, New York.</p> <p>GROSS, S. D., M.D.,
Philadelphia.</p> <p>HAMILTON, FRANK H., M.D.,
Professor of Surgery in the Long Island College Hospital, Brooklyn, New York.</p> <p>HARTSHORNE, EDWARD, M.D.,
Surgeon to the Pennsylvania Hospital, Philadelphia.</p> <p>HOLLINGSWORTH, SAM'L L., M.D.,
Physician to Wills' Hospital, and formerly Editor of the Philadelphia Medical Examiner.</p> <p>HORNER, WILLIAM, Esq.,
Warrenton, Virginia.</p> | <p>HOSACK, ALEX. EDDY, M.D.,
New York.</p> <p>HUNT, E. K., M.D.,
Hartford.</p> <p>HUNT, SANFORD B., M.D.,
Formerly Professor of Anatomy in the University of Buffalo.</p> <p>JACKSON, SAMUEL, M.D.,
Philadelphia (formerly of Northumberland).</p> <p>LA ROCHE, R., M.D.,
Philadelphia: Author of a Treatise on Yellow Fever, &c. &c.</p> <p>LOGAN, THOMAS M., M.D.,
California.</p> <p>MARCH, ALDEN, M.D.,
Professor of Surgery, Albany Medical College.</p> <p>MCCLELLAN, JOHN H. B., M.D.,
Formerly Professor of Anatomy in the Pennsylvania College, Philadelphia.</p> <p>MEIGS, J. AITKEN, M.D.,
Professor of Physiology in the Pennsylvania College, Philadelphia.</p> <p>MITCHELL, THOMAS D., M.D.,
Professor of Materia Medica in the Jefferson Medical College, Philadelphia.</p> <p>MORRIS, CASPAR, M.D.,
Philadelphia.</p> <p>RICHARDSON, S. G., M.D.,
Professor of Anatomy in the University of Louisiana, New Orleans.</p> <p>WARREN, EDWARD, M.D.,
Massachusetts.</p> <p>WHITE, JAMES P., M.D.,
Professor of Midwifery in the University of Buffalo.</p> |
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AMERICAN MEDICAL BIOGRAPHY.

BENJAMIN RUSH.

1745—1813.

A BIOGRAPHER of Dr. Rush, in Delaplaine's Repository, says that all things conspired to render him illustrious; "that, had he been placed in the cheerless vale of obscurity or destined to struggle under a want of patronage, his genius might have withered, and his ambition forsaken him, beneath the influence of disappointment and neglect."

It is vain to conjecture what might have been,—the business of the biographer is to set forth what actually was. Nor must the reader forget how meritorious it is to become great and good, since so few attain to this twofold eminence, even among those who have been favored by every impulse to goodness and greatness.

The biography of Rush has been confided to the present writer, because he was supposed to have an intimate knowledge of the man and of his works, having attended the four last courses of his lectures, and having ever since held him in grateful remembrance and high esteem, without subscribing, however, to all his doctrines. He will endeavor to tell his story without the least hyperbole; he will not draw on his imagination for the image of a perfect man and physician; for, to honor such a character, it is only necessary to relate facts, and adhere to truth.

He would here apprise the reader, in order to open his understanding to some difficult passages, that Rush, in contested questions, regarded his conscience more than public favor, and thereby made numerous enemies, whose hatred, with little dilution, has been transmitted even to the present time.

That the reader may have an idea of the man about whom he reads, we shall here describe him as he appeared to us, and probably to most others, the last five years of his life. He was above the middle height, very erect, rather slender, with small bones, and rather thin; his hands and wrists, feet and ankles, being small and finely formed. His face was thin; nose aquiline; eyes beautifully set, large, blue, mild, and benevolent; forehead broad and high; head long in the transverse diameter, and nearly bald from the crown forward; his hair clubbed behind, and powdered. His face was of a fair and healthy complexion, not handsome or what is called fine-looking, for his cheeks were fallen in, many of his front teeth lost, and age with care had left its wrinkles. His countenance, in conversation, was highly animated; when reading to himself or going abroad, it evinced intense thought, entire abstraction, and firmness of purpose. His unfrequent smile was peculiarly gracious, but he hardly ever laughed. When walking the street, which was seldom, he was very erect, step firm, elastic, and rather military, never using a staff, his arms folded on his breast; he uncovered to every one poor or rich who uncovered to him, and his passing words were, "I hope you are very well, sir," uttered with his habitually strong but mild voice. His dress was very plain, generally of drab-colored cloth; he rode in a plain vehicle with two wheels and one horse, the same little negro by his side who had lived with him more than thirty years,—master and man now grown old together. In this open carriage, we saw him facing the storms the last winter of his life.

His bearing was very simple and artless, without a semblance of affectation, remarkable for kindness, cordiality, and even condescension. An enemy, writing of his urbanity in the year 1797, says, "the resources of his amenity and courtesy were

all but boundless, for he was among the most polished men of that polished age."* In conversation, he was acknowledged by all to be pre-eminent; yet he did not appear to be at all self-complacent of his colloquial powers. He never interrupted another, as the fashion now runs; nor did he arrogate to himself an undue portion of the talk, an offence too often given in these later times. Piety and benevolence were, to human perception, his predominant feelings. In fine, he was the accomplished Christian gentleman whose "imposing first appearance" subdued every mind, and won every heart. An eminent-lawyer told me that he was present at his first interview with the great Priestley, and that he was lost in admiration of his courtesy: looking at his picture while saying this, he added, "they could not give us his benevolent blue eyes."

How far he was subject to irritation, is known only to his Maker, for he had acquired a perfect dominion over it in public. Of the six professors of our time, he was the only one who was never seen angry,—over his face there never came the shadow of a cloud. Take the whole man, body, countenance, and demeanor, there was, as Hamlet says of his father, "a combination and a form indeed, to give the world assurance of a man." His portrait, painted by the eminent Sully, in 1812, is a perfect likeness.

He was born the 24th of December 1745 O. S., on a hereditary farm belonging to his father, on Poquestion Creek, thirteen miles northeast of Philadelphia, near the turnpike leading to Trenton. His great-great-grandfather was John Rush, a captain in Cromwell's army, and highly esteemed by that keen observer of men. He came to America in 1683, and settled in Byberry Township, thirteen miles northeast of Philadelphia, where he lived on his farm and died in 1699, at the age of eighty. William the great-grandfather died in Byberry, in 1688. James, the grandfather, was so careful in his business that he left not a single debt behind him. John, the Doctor's father, was a man of a gentle and meek spirit, so perfectly just

* Dr. Caldwell's Autobiography.

that to be as honest as John Rush was a proverb. He died in Philadelphia in 1751 and was buried in Christ Church graveyard. His wife's name was Susanna Morris; of respectable family she must have been, as the Rev. Dr. Samuel Finley, afterwards President of Princeton College, married her sister. She lived to 1795, her seventy-eighth year, and died in the Doctor's house. "Let me be buried by my husband," she said, "he was an angel to me." She was buried there, with the encomium, "best of mothers" on her tomb, and this subscribed, B. Rush. Is there any mortal so obdurate as not to be thankful that this best of mothers lived to rejoice in the honors of her son?

But whatever is attainable in relation to Rush's ancestry and their long residence in Byberry, can be learned from the following letter, with more satisfaction than from any other source. It was written about eight months before the Doctor's death, to his intimate friend, John Adams, ex-President of the United States. We copy it from Watson's *Annals of Philadelphia*.

"I was called lately to visit a patient in that neighborhood, and having with me my youngest son, I thought I would avail myself of the occasion to visit the farm on which I was born, and where my ancestors for several generations had lived and died. In approaching it, I was agitated in a manner I did not expect. The access was altered, but everything around was nearly the same as in the days of my boyhood, at which time I left it. The family received me kindly, and discovered a disposition to satisfy my curiosity, and gratify my feelings. I asked permission to conduct my son up stairs, to see the room in which I drew my first breath, and made my first unwelcome noise in the world, and where first began the affectionate cares of my beloved and excellent mother. I next asked for a large cedar tree which once stood before the door, planted by my father's hand. It had been converted into the pillars of the piazza. Filled with emotion, I embraced the one nearest me. I next inquired for the orchard planted by the same hand, and was conducted to an eminence behind the house, where I saw a

number of apple trees which still bore fruit, to each of which I felt something like the affection of a brother. The building, which is of stone, bears marks of age and decay. On one of the stones, I discovered the letters J. R. Before the house flows a small but deep creek, abounding in pan-fish. The farm consists of ninety acres, in a highly cultivated state. The owner did not want to sell, but I begged if he ever should incline to dispose of it, to make me, or one of my surviving sons the first offer. While I sat in its common room, I looked at its walls, and thought how often they had been made vocal by my ancestors,—to conversations about wolves, bears, and snakes, in the first settlement; afterwards, about cows and calves, colts and lambs; and at all times with prayers, and praises, and chapters read audibly from the Bible, for all who had inhabited it of my family, were pious people, chiefly of the sect of Quakers and Baptists. On my way home, I stopped to view a family graveyard, in which were buried three, and a part of four successive generations, all of whom were the descendants of Captain John Rush, who, with six sons and three daughters, followed William Penn to Pennsylvania, in 1683. He had been a captain of a troop of horse under Oliver Cromwell. . . . I retain as his relics, his sword, watch, and Bible-leaf, on which are inscribed, in his own hand, his marriage, and children's births and names. My grandfather, James Rush, has his gravestone and inscription in the aforesaid graveyard. . . . While considering this repository of the dead, then holding my kindred dust, my thoughts ran wild, and my ancestors seemed to stand before me in their homespun dresses, and to say, 'What means this gentleman by thus intruding upon our repose?' and I seemed to say, 'Dear and venerable friends, be not disturbed. I am one who inherits your blood and name, and have come here to do homage to your Christian and moral virtues; and truly I have acquired nothing from the world, though raised in fame, which I so highly prize as the religious principles I inherited from you; and I possess nothing that I value so much as the innocence and purity of your character.'"

Rush lost his father in his sixth year, when his mother, now

left with a small property, went into business in Philadelphia. She has been uniformly represented as a good and prudent woman who, by industry and economy, supported her family respectably, and was ambitiously determined to bestow on her sons a liberal education. This we often heard more than fifty years ago. Even their bitter enemy, the celebrated Cobbett, says, "she was a very kind and pious Presbyterian." Jacob, the younger son, became an eminent lawyer, and finished his life in an honorable old age, being for many years President Judge of a Philadelphia court. There was one sister who lived unmarried and died in 1798, at the Doctor's house.

The Rev. Dr. Finley, mentioned above as his uncle by marriage, lived at Nottingham, Maryland, on the Patuxent, near that sorrowful spot where the British landed in 1814, on their way to Washington. Here he governed an academy with great reputation, acting at the same time as pastor of a church. To this place, propitious to study, morality, and religion, Benjamin was sent in his ninth year and received into the Doctor's family. Under the care of this good man, standing in the triple relation to him of teacher, pastor, and near connection, he is supposed to have experienced something like paternal care; here too, as the people around were religious and exemplary, he no doubt established those various good habits that were never broken.

In his fourteenth year, he was sent to Princeton College, then under the presidency of the Rev. Samuel Davies, a divine highly distinguished both for piety and eloquence. He graduated Bachelor of Arts in 1760, while yet in his fifteenth year. Dates show that he must have been a diligent if not a precocious student, and that he had entered college by the junior class.

As he was remarkably happy in elocution and debate, his friends encouraged him to study law, as the province best suited to the display of his peculiar talents and the gratification of their laudable ambition; but Dr. Finley, knowing the genius of his pupil, diverted his attention to medicine. He therefore quickly began his studies under Dr. John Redman,

the most eminent physician of Philadelphia; and so assiduous was he that, during his six years of pupilage here, he was absent from the duties of the office only two days. As a striking proof of his laborious devotion, he now translated the Aphorisms of Hippocrates from Greek, and kept a commonplace-book, in which he wrote concerning whatever he saw, read, or thought,—a practice which he maintained to the end of his life, and recommended strongly to his pupils, as may be seen in his Introductory Lecture for 1809. To this journal he referred in the yellow fever of 1793, and found there the only record then known to be extant of the same fever, which he had witnessed in 1762,—a memorable instance of the utility of a young man's care.

In 1766, in his twenty-first year, he went to the great medical school of Edinburgh, then in the height of its glory under the fascinations of Cullen; and there is abundant proof that he became a favorite of this great teacher. In 1768, he graduated M.D., having defended a thesis, *De concoctione ciborum in ventriculo*. During his residence in Edinburgh, Dr. Witherspoon of Scotland, was elected President of Princeton College, but he declined the honor and the office remained vacant more than a year. The trustees then, calling to mind the merits of their alumnus, Rush, deputed him as their commissioner to negotiate with Dr. Witherspoon, and to invite him a second time. This delicate trust having been successfully executed, an intimate friendship began between the young man and the eminent scholar, that lasted as long as they lived. The imported President became an American patriot and sat with Rush in the Congress of 1776, where they set another seal to their friendship, by signing together the Declaration of Independence. In his lectures and writings, Rush often quoted the authority of his venerable friend; and says, in his Introductory Lecture for 1809, that he was one of the three "most copious, methodical, and correct extempore speakers" in the house.

The following winter, Rush attended the hospitals, lectures, and other sources of instruction in London. Dr. Franklin was

then residing in that city, and he proved kind to his countryman, frequently introducing him to good society at his house and table. When Rush was preparing the next spring to return home, Franklin urged him to spend some time in France; when, finding, through the most affectionate inquiry, that funds were wanting, he fairly obtruded upon him a large sum. This shows conclusively that the prudent, economical, calculating Franklin plainly saw evidence of great worth in the young man. It is an old saying that facts speak louder than words, and here is one that speaks with the lungs of Stentor and the authority of Franklin.

He then spent some months in the hospitals of Paris; and in August 1769, after nearly nine years' study of medicine, he settled in Philadelphia, as a practitioner of what he had so faithfully learned. He was immediately elected professor of chemistry in the Medical College of Philadelphia, his colleagues being John Morgan, William Shippen, Adam Kuhn, and Thomas Bond. He had brought from London a chemical apparatus, presented to the College by Thomas Penn, one of the Proprietors of Pennsylvania, who had been promoting medical instruction in Philadelphia for some time. This institution was now in its fourth year, and had conferred the degree of Bachelor of Medicine on nine students at the previous session.

He was still in his twenty-fourth year, and yet he had spent nine years in the study of medicine,—such are the great advantages of an early beginning in the acquisition of this “long art.” His biographers tell us that he was very successful in acquiring and retaining professional business; this is highly probable, for he possessed every requisite to the forming of friendships, and to the successful treatment of disease. In 1771, he appeared as an author, and spread his reputation among the Philadelphians, particularly through the benevolent Society of Friends, by essays on slavery, and by sermons to young men on temperance and health. He published also something on mineral waters, a subject in alliance with his professorship. These all appeared in the magazines of the times; and as native literature was scarce, they were no doubt generally read and talked

of, to the young physician's advantage. In his Introductory Lecture for 1807, on "The Means of Acquiring Practice," he mentions the utility of writing on a subject of public concern.

In 1774, then only in the fifth year of his practice, he delivered the annual oration to the Philosophical Society,—"An inquiry into the natural history of medicine among the Indians of North America, with a comparative view of their diseases and remedies with those of civilized nations." With respect to health, strength, endurance, longevity, morals, and every virtue, he draws a comparison highly favorable to civilization in its uncorrupted state. But here he shows that his countrymen were even then running headlong in the evil ways of European nations; that they were relaxing their stamina by luxury and idleness. Here he makes his first attack on the use of spirits, and probably the first that was publicly made in Philadelphia. He concludes by setting forth most eloquently the possible future glories of Pennsylvania, under the fostering care of science and government. It is a work of great merit; and whether in style, manner, or force, it is not surpassed by any of his later writings. It ought to be read and studied by all the luxurious and idle, that they may see and feel how poor is their hope of preserving health or of attaining longevity.

The portentous troubles with the mother country were now too clearly foreseen as at no great distance, and Rush, from the first sign thereof, became a decided patriot. He had been a member of a debating society in London, at which Dr. Franklin was sometimes present, and as he had there distinguished himself by his manly defence of his country, so he now wrote much in the newspapers in favor of colonial rights. A distinguished and reliable young man he must have been, or he could not have been found in that memorable house of Congress which, at the manifest risk of their lives, had the courage to liberate their country, by signing the Declaration of Independence. Honorable as a seat in this Congress was, it was given to Rush with more than usual honor, in the following manner.

He was a member of the Provincial Conference of Pennsylvania, and chairman of the committee to which was referred the great question, whether it had become expedient for Congress to declare Independence. The report they made (see Jour. of House Rep., Vol. VII, 48) was adopted, and sent to Congress the same day. It is a most animating document, most probably written by Rush, as he was chairman of the committee and ever ready with his pen. The whole committee consisted of himself and Colonel James Smith. The report includes all that has been so much praised in the Declaration of Independence, of which it might appear to be the protocol. When Congress had decided on their great measure, five members from Pennsylvania, who were in favor of postponing it, withdrew from the House, when the State Convention appointed Rush and four others to fill their places. Thus, our patriot went into Congress knowing what he had to do. He did not sign the tremendous parchment because he was a member, he became a member that he might sign it,—a fact that greatly enhances the merit.

This year, 1776, he was married to Julia, daughter of Richard Stockton of Princeton, who was also a delegate to Congress, and signed the Declaration; an alliance truly honorable and highly advantageous even to this rising man.

Towards the end of this year, he was appointed Surgeon-General of the army for the Middle Department, which office he exchanged the following July for that of Physician-General. In the bustling discharge of his duties, he made many useful medical observations; which were afterwards interwoven with his writings; and in his "Medical Inquiries," there is a paper entitled "Result of observations made in the military hospitals of the United States."

Among the evils of war, one of the most affecting is that friends must sometimes face each other on the field. While walking over the ground after the battle of Princeton, Rush recognized in a dead officer the countenance of one who had been very dear to him. Captain Leslie, son of the Earl of Leven, attended lectures with him at Edinburgh, and often invited him

to his father's seat in the country, where, in the confidence of friendship, they often descanted on the coming troubles. He pressed Leslie to consider him as a friend, should he be sent to America, and any misfortune befall him. On these terms they parted, to meet no more till this fatal day. Had Leslie been yet alive, they might have renewed the meeting of Glaucus and Diomed before the walls of Troy, and like these, they might have tenderly adverted to the paternal hospitality. Instead of this, there was found in Leslie's pocket, a letter of friendship he had written to Rush the previous day. Rush had the body of his friend carried away in their march to Pluckemin, and buried in the churchyard with military honors. A relative of Leslie visited the grave after some years, with the intention of placing a monument, but he found that Rush had done the work, and he retired, as he says, with tears of gratitude. This monument, yet unimpaired by time, bears the following inscription, which does honor both to Leslie and to the grateful spirit of Rush,—“In memory of the Hon. Captain William Leslie, of the 17th British Regiment, son of the Earl of Leven, in Scotland. He fell January 3d, 1777, aged 26 years, at the battle of Princeton. His friend, Benjamin Rush M.D., of Philadelphia, hath caused this stone to be erected, as a mark of esteem for his worth, and of respect for his noble family.”

Notwithstanding his many distracting duties,—the battles of Trenton and Princeton, the inoculation of the army that winter, and then the battles of Brandywine and Germantown, with the awful sickness at Valley Forge, he found time for writing four very long letters to the people of Pennsylvania, commenting severely on their Constitution of 1776, and urging an immediate revisal. There was a party in the State who thought it too democratic; these called themselves Republicans, and Rush appears to have been one of their leaders. The letters descant principally on the dangers of giving the legislative powers to a single house, bringing forth authorities both ancient and modern. He shows that he was not a man of the Hippocratic genus merely, but also a prophetic politician, who foresaw

all the monstrous evils resulting from the savage unity of the French legislature in a single house. The subject was not medical, philosophical, or literary, nor did it relate to the cause of Independence which had been exercising his mind; it was entirely new to him, requiring therefore much appropriate reading and severe study, so that his present political, seems to have equalled his future medical ardor. All tradition indeed relates, that his exertions in letters and newspapers were very great; during the whole struggle for liberty and the organization of the General and State governments. The four letters just mentioned are the work of a master; they are a torrent of invective, not unworthy of Junius or Burke.

In February 1778, he resigned his office in the army, for which he had two reasons, either of them sufficient,—first, his sense of duty to the soldiers had led him to complain of wrongs in a certain department; second, there arose some coldness between him and the Commander-in-chief. It was said then, what is still objected to him by his enemies, and by those loose talkers who are without affection either good or evil, and therefore neither know nor care, that he caballed against Washington. This charge was not proven to the world; and were it proven, it would come to nothing. As Hildreth, the historian, says, “Washington of that day was not Washington as we now know him, tried and proven.” His command of three years had shown little else than a series of disasters, while Gates enjoyed the fortunate reputation of having captured a great army. Hence the Legislature of Pennsylvania addressed a remonstrance to Congress, in which, says Judge Marshall, “they manifested in very intelligible terms their dissatisfaction with Washington.” A party, moreover, had gradually formed itself in Congress, of which the leaders were those renowned patriots, Samuel Adams and Richard Henry Lee. These imputed to Washington a want of energy and a system of favoritism. Now surely it was not to Rush’s dishonor to be found in company with these great men, or such as they would admit to their councils; it could not disgrace him to think as did the Legislature of Pennsylvania. They all lived to see Washington

proved, and no doubt the minds of all were changed. Rush is no more to be blamed for undervaluing Washington in 1778, than for rejecting in a most dangerous case, a medicine he had not sufficiently tried. One ray of reason, however, dissipates the intended stigma. He had been a decided and active Whig from the very beginning, and the conspiring with a few of the best of men against the many and the powerful, strongly proves the vigor and warmth of his patriotism. "It only affords a melancholy proof," says an eminent writer, "that the purest of men may be led into error." See Johnson's *Life of Greene*, I, 157.

But anonymous letters were written, and Washington imputed one of these to Rush. The imputed letter is indeed without a name, but its whole tenor shows that the writer intended to be recognized by Patrick Henry, to whom it was addressed. He did not subscribe his name lest it might, in those slippery times, fall into other hands. It breathes throughout the most ardent patriotism, and truly it is what no honest man ought to be ashamed of. Suppose a parallel case: Hamilton is ill under Rush's care; Washington writes the patient an anonymous letter, but in such language that the author must be recognized, advising him to dismiss Rush and send for John Morgan, an older practitioner; but Hamilton is cured by Rush, who afterwards becomes a great physician; now has Washington done what ought to excite the ire of Rush's friends through all time, and that of their children then unborn? It was very wrong in Judge Marshall to publish this letter after twenty-six years, and send it abroad with an under current of scandal, to inform the world of its imputed author, calling it "a machination probably with good intent." This could not have been done in a Christian mind, for it was not necessary to Washington's fame. (See the letter, dated Yorktown, January 12th, 1778, Marshall's *Life of Washington*, Vol. III, notes to Chapter VI.) Had Marshall and others been disposed to relate the whole truth, they might have informed us that Washington stood so low at that time in the esteem of Congress,—of which Rush was not then a member,—that a majority

were preparing to pass a resolution, to arrest him at Valley Forge; a bad intention, prevented only by procuring during the night the hurried arrival from New York of an absent member. See "Dunlap's History of New York," Vol. II, 188. It is, moreover, related on the reliable authority of the present Judge Jay, that the great and good man, his father, told him "there was a most bitter party in the old Congress, against Washington from first to last." See "Irving's Life of Washington," Vol. III, 874, note.

Though poor at this time, Rush would not receive any compensation for services in the army, an example not commendable in either him or Washington, as thereby they made themselves objects of envy to many good men, whose wives and children could not forego their pay. *Sic utere tuo ut non alienum lædas*, is a sound maxim of law and morals: use your own property as you please, but so as not to injure your neighbors.

He soon returned to Philadelphia and resumed his practice. The College had been interrupted by the presence of the British army, but it was reopened in the autumn of 1778 with a class of 60, an auspicious number surely in the deplorable state of the country. We must now think of him for some years principally as a professor in the College and a practitioner of medicine, but that his tongue and pen were busy in the cause of his country, humanity, and science, there are many proofs. Soon after this, Dickinson College was projected, of which he was said to be the father, for what reason we cannot ascertain. He was, however, one of the first board of trustees; and it was by his delicate management that Dr. Nesbitt was induced to leave Scotland and preside in this unpromising institution. So important were this gentleman's services, that Rush, if not the father, might not inaptly be called the grandfather of this College.

In 1785 he published "Considerations on the Test Laws of Pennsylvania," which had disfranchised every man who could not swear or affirm "that he had not, since the Declaration of Independence, aided, assisted, or in any way countenanced the

King of Great Britain, his generals, armies, or adherents, &c." He pleads the cause of the nonjurors through twenty-three closely printed pages, with a torrent of argumentation that would honor a professed and profound politician.

About this time he projected the Philadelphia Dispensary, and went about the collection of funds with his usual vigor and success. The next year it went into operation, and proved to be a prolific example to other cities. Thus he had the comfort of seeing his good works multiply themselves.

In 1786, he read to the Philosophical Society his very important "essay on the influence of physical causes on the moral faculty," which we shall particularly notice in a subsequent page.

This same year he published also an "address to the legislature of Pennsylvania on the establishment of public schools, and on the mode of education proper in a republic." He shows herein that he had thought deeply on the subject, with his usual energy and zeal, republican fire and Christian principles.

In 1787, the College of Physicians was established, and he wrote for them a discourse on the objects of the institution, published afterwards in their Transactions for 1793. It is a performance of striking merit, showing great comprehension and foresight for that early period. Hardly anything could be added to it even at the present time. He points out all the duties of the College and the hopes that might be justly entertained of its future utility and beneficence; he shows the opportunities it would afford of mutual improvement, then everything which they ought to attempt for the advancement of science and for the public good. It is a manifestation of such a mind as no other man in the house possessed. His usual glow of patriotism concludes the work with the belief that "the influence of republican forms of government on science, and the vigor which the American mind had acquired by the events of the Revolution," would contribute greatly to the advancement of medicine.

This same year we find him, for a busy practitioner and professor of medicine, entirely out of his place; to use medical language, he had suffered a dislocation. The kindred shades of

Hippocrates and Sydenham might have pardoned his political avocation when his country needed his help, but now the claims of medicine on his time were paramount. Yet he became a member of the Convention of Pennsylvania for the adoption of the Federal Constitution. In a letter to a friend, he says: "The new Federal Government will be adopted by our State. It is a master-piece of human wisdom, and happily accommodated to the present state of society. I now look forward to a golden age. The new Constitution realizes every hope of the patriot and rewards every toil of the hero. I love my country ardently, and have not been idle in promoting her interests during the session of the Convention. Everything published in all our papers, except the 'Foreign Spectator,' was the effusion of my Federal principles."

The Legislature of Pennsylvania had lately made some criminal laws abhorrent both to philosophy and humanity, and Rush could not go through Philadelphia without seeing his fellow-men chained to wheelbarrows or writhing at the whipping post. When the benevolent Chremes was asked how he could find leisure amidst his own affairs to attend to other people's business, he answered, "I am a man."* Such was Rush; and therefore he read this year to a society, which was accustomed to meet at the house of Dr. Franklin, "An inquiry into the effects of public punishments on criminals and upon society." By this and subsequent exertions to the same end, he is known to have contributed greatly, if not more than all others, to the amelioration of the penal code.

This same year, 1787, he was chosen a member of the Convention of Pennsylvania for the forming of a State Constitution; but he probably undertook this extraneous business that he might have an opportunity of doing his utmost with respect to public punishments and public schools, concerning which he had been writing. He might, moreover, have hoped to impress

* Chreme, tantumne ab re tua est otii tibi
Aliena ut cures, eaque nihil quæ ad te attinent?
Homo sum, humani nihil a me alienum puto.

TERENT. HEAUT., Act 1, Scene 1.

his fellow-laborers with the principles he had defended in his four letters of 1777 on the vices of the existing constitution. Having rendered these services to his country and to his native State, having helped them to the utmost of his power in all their dangers and difficulties, in the establishment of their government and their security from anarchy, he said that he had now done with politics forever, feeling it his duty to devote himself to his profession and to the providing for his family.

He had become a politician from principle. In his lecture on "The Duties of a Physician," 1789 (see "Medical Inquiries and Observations," Vol. I.), he recommends to his class "a regard for all the interests of their country," as their education and their influence qualify them for public usefulness. He says, "for the honor of our profession, it should be recorded, that some of the most useful men, both in the cabinet and the field, during the late war, were physicians." Useful they certainly were, but we greatly doubt the soundness of the doctrine. We have it moreover somewhere recorded that, finding so much happiness in the study of medicine, Rush lamented that he had spent his time in politics.

Though now devoted to medicine, the republican fire was still glowing in his breast; and as a means of kindling and fanning it through all future time in the hearts of his countrymen, he published "Thoughts on Female Education." He observes that a philosopher once said, "let me make the ballads of a country, and I care not who makes the laws; he might, with more propriety, have said, let the ladies be educated properly, and they will not only make and administer the laws, but form manners and character." He says that the first signs of declension among a people are seen among the women; "their idleness, ignorance, and profligacy will be the harbingers of our ruin." He then draws a picture of evils resulting from the perverse education of females, not unworthy of Tacitus. The women of 1860, shameless in their prodigality, ought to study this paper with care.

In the preceding pages, we have briefly noticed his principal publications up to the present year; but from this time to his

death, they are so numerous and important that, for the sake of brevity, we must pass them by, referring the reader to the appended Bibliography for their titles, and to the books themselves for much that must always be deeply interesting as well as pleasing to the student of medicine, politics, and philosophy, but above all to the Christian philanthropist.

In 1789, in his forty-fourth year, he was elected to the chair of Theory and Practice, in place of Dr. John Morgan, deceased. His introductory lecture was partly occupied by a memorial of his predecessor, who had been the founder of public medical instruction in America, and in this College. This memoir, since published in the "Philadelphia Medical and Physical Journal" Vol. I., is believed to be nearly all that is attainable concerning the life of a highly educated and strong man in the profession, whose memory and services ought to have been cherished with pride and gratitude.

In his early practice, Rush was a full disciple of Cullen; for in his oration before the Philosophical Society, 1774, he says, that the system of this great teacher "will probably last till some new diseases shall unfold other laws of the animal economy." How long he remained in his youthful delusion is, perhaps, unknown; but at the present period, it appears, he began to make Brown's "Theory of Life" available to the construction of a new system. Dr. Ramsay relates that, in 1789, Rush said to him, "the system of Cullen was tottering; that Brown had brought forward some new and luminous principles of medicine, but mixed with some that were extravagant; that he saw a gleam of light, &c." This very sentence was, no doubt, borrowed from Brown, who represents himself as bewildered by theories, and in the state of a traveller in an unknown country who had lost his way in the dark: *sed lux demum affulsit*,—a gleam of light, like the break of day, now dawned upon him. The doctrine of life, he adopted, with some modification; but the system of medicine, which its wonderful author appended thereto, he utterly rejected. It has been very common, and a shameful ignorance it is, to identify the systems of these

teachers. Nothing can prove greater obliquity of mind or more glaring ignorance, than to call Rush a Brunonian.

In 1791, the College was merged in the University, and to Rush was assigned the chair of the "Institutes and Clinical Medicine;" the chair of "Practice" being confided to Dr. Kuhn. This change, it is probable, interfered for the present with his dissemination of the novel doctrine.

The year 1793, the forty-eighth of his age, exercised and manifested the great powers of Rush. The yellow fever spread devastation and terror over the city, utterly confounding the American physicians, to whom it was a perfect novelty. Their practice, as was to be expected, failed miserably; nor were the French physicians, who had seen the disease in the West Indies, a whit more successful. Every method failed, till the wretched doctors were almost struck dumb, as Lucretius says were those in the plague of Athens: *musabat tacito medicina timore*. Rush gives an awful history of the distraction of his mind at this time; but while turning over books, between hope and despair, he remembered a manuscript concerning a yellow fever in Virginia in 1741, which had been given him by Dr. Franklin. From this he learned that the debility was only apparent; that it was oppression of the vitals only; that if this was removed, the system would rise into open, free reaction in almost every recent case.

He then began to purge freely, and finding this to relieve the oppressed system, and to raise the fever into inflammatory action, he tried bleeding; but, as Dr. James Johnson tried it, "with a trembling hand and a palpitating heart." The new practice was unexpectedly successful, and Rush quickly imparted it to the College of Physicians, to the apothecaries, and to the public. But now it happened, as was to be expected from the infirmities of man, that a furious storm was raised against this innovation. Rush, however, had some friends among the younger physicians, and some highly intelligent pupils,—these triumphed over the enemy by the new method, so that hardly any patient was lost to whom they were called during the first twelve hours. Even the apothecaries, some

clergymen, and other intelligent persons whom he names, treated the disease with success. Many physicians, however, pursued other measures, and would not be taught by their own failures. Those too, who were disposed to try the new method without the courage to pursue it to the requisite extent, were unsuccessful and contributed greatly to its discredit, so that complete success was confined to a few. The disputes among the physicians, in which the people took an active part, soon became as epidemic as the fever itself; and, like the evil man, according to St. Peter, prevented much good by preventing the adoption of bleeding and purging.

Whether the fever was imported or generated at home, was another source of acrimonious controversy. Rush proclaimed from the first and on all occasions, that it was of domestic origin, and thus he brought upon himself the hatred even of many who had been his sincere friends; for nothing could be more ungrateful to the property-holders and merchants than the opinion that their city, in the prosperity of which all their hopes of fortune were centred, had generated this fatal disease and therefore would probably do it again.

Besides his labors and sorrows abroad, Rush had to struggle with sickness and sorrow at home. His maiden sister, who had refused to leave him, who had supported him in all his trials, who had been his casuist in his choice of duties, died in his house, the 1st of October. He says, "I got into my carriage an hour after she expired, and spent the afternoon in visiting patients. According as a sense of duty, or as grief has predominated in my mind, I have approved or disapproved of this act ever since." In addition to this, his pupils who, to serve him most readily, had lived in his house during the epidemic, sickened, and one of them died, having become delirious, and therefore refusing all treatment. Another died in the country, whither he had gone with the intention of soon returning. His aged mother was too infirm to be removed; his wife with seven children was in the country. Hardly a day passed that one or more of his dearest friends, often the fathers of large families, were not seized, some of these his medical brethren.

He visited from one hundred to one hundred and twenty patients a day, besides the crowds that he prescribed for in his house and in the street. He was sometimes so sunk with labor and care as to faint, and he was often obliged to lie down in the houses of sickness. In this debilitated state he was feverish on the 15th of September, but having been bled and purged, he resumed his labors the next day, and continued them, though in a state of great weakness, with slow fever, irregular chills, and a troublesome cough.

The second week of October was the most fatal of that year, and Rush was attacked; but by a timely and vigorous use of the new remedies, in the hands of his pupil, Mr. Fisher, then residing in his house, he was soon recovered. His convalescence was very slow, and he does not say that he saw any more of the fever that year.

He published a full history of this epidemic the following year, which obtained unbounded praise throughout the medical world. Dr. Trotter, a man long versed in fevers, pronounced it "the best history that was ever written of any epidemic. Who would not travel through this vale of tears, amidst blasts of contagion, to share the well-earned fame of Dr. Rush." Dr. Zimmerman said that "he merited a statue, not only from Philadelphia, but from all humanity;" and Dr. Lettsom states "that all Europe was astonished at his novelty and bold decision, his unprecedented sagacity and judgment."

He concludes the history of this fatal year in returning thanks to his pupils for their support and sympathy. They were Dr. Woodhouse, afterwards Professor of Chemistry, Edward Fisher, who became eminent in South Carolina, and John Redman Coxe, the present venerable ex-Professor of the University of Pennsylvania. "But wherewith, he says, shall I come before the great Father and Redeemer of men, and what shall I render unto him for the issue of my life from the grave? *Here all language fails. Come then, expressive silence, muse his praise!*"

There were numerous cases of the fever in 1794, but it did not become epidemic again till 1797 and 1798. In these years, the

new method, with occasional modifications, was as successful as in 1793. Rush says, however, that in 1798, the prostration was sometimes too great to admit of bleeding. Here we must do honor to his candor. The same principles, however, governed him and led to the same general success. Local bleeding, purging with calomel, sweats, blisters, counter-irritation, these conduced to the relief of the laboring viscera, which would have been still more oppressed by the old treatment. In most cases, however, copious bleeding was requisite, as we learn not only from Rush, but from his friends and from some of his opponents.

His enemies now found a ready tool in William Cobbett, who soon became the most accomplished editorial villain this country had ever known. He published a paper, called *Peter Porcupine's Gazette*, which was continually blackened with slandering Rush and his practice. Those who had been offended by the doctrine of domestic generation, assisted Cobbett with their countenance and their money; and having, as Johnson said of Junius, "the sympathetic favor of plebeian malignity," they made a very serious impression on the public mind. As the wayward Jews, to use Gibbon's comparison, were perpetually forgetting the miracles wrought in their favor, so the Philadelphians forgot their benefactor. Some who had found their own and their families' safety in the depleting treatment, now resorted to other physicians, and perished by their malignant ingratitude. Rush thought that it was owing to the malevolence of party that nearly as many died in 1798, as in 1793, though not half as many were affected.

Had Rush been one of those calculating misers, who secure popularity by simply holding their tongues, his bleeding and purging would have been soon received and established, for even some medical enemies had adopted his treatment; but domestic generation and its impetuous advocate, could not be thought of without abhorrence; hence, bleeding and calomel were tortured by Cobbett and his friends, into something worse than poisoned arrows or *Porcupine's* quills. It was felt that Rush's medical character was injured, and he was encouraged

to bring a suit against Cobbett. The jury mulcted him in \$5000, which, Dr. John W. Francis says, Rush distributed among the poor. Cobbett's suborners finding him of no further use, now left him to his fate. He was sold out by the sheriff, and devastated, as he declares himself, to the amount of \$8000. He then went to New York, where, as St. Paul says of the evil man, he waxed worse and worse, and established a newspaper which he called "The Rush-light." In the prospectus of this, he says, "Rush's lawyer and the judge made it a crime in me, not to have examined the system. Please Heaven, they shall not have to charge me with the like omission this time, for if I leave unexposed any one of its absurdities, if I leave unrelated one anecdote in the history of blood, it shall be for want of knowledge, or of memory, and not for want of inclination."

Soon after this, Rush began to suspect that he had indulged in a serious error in believing the yellow fever contagious. He was very slow and cautious in making this important change. At first he thought it fully contagious, then only in its concentration; lastly, he satisfied himself that it was not such under any circumstances whatever; and this opinion, notwithstanding some slanders to the contrary, he is known to have persevered in to his end. How early he had fully satisfied himself of this important truth is not known, but in October, 1802, he wrote a letter to Dr. Edward Miller, of New York, afterwards published in the Medical Repository, Vol. VI., in which he argues most ably against contagion; and hopes this public recantation of his error may make some atonement for the evil he did by supporting it.

He made this retraction at a time when the belief in contagion was general and strong; for he says, "the majority of our citizens who believe in it is greater, and they are more decided, than in former years." His change, then, was made in despite of its unpopularity, a fact in harmony with his usual independence. That he ever assented to the doctrine of contagion, has been made a very great detriment to his fame and to science; for his opinion was eagerly caught at by the

favorers of this mortiferous belief; and it has been ignorantly or wickedly attributed to him, and propagated by European books ever since his public retraction. Even an American editor of Good's large book, let it pass through his hands without a note in correction of this inexcusable error. In our last page we shall notice a wicked attempt that was made after his death to prove that, in dying, he confessed his belief in the contagion of yellow fever; and that he had taught non-contagion for reasons known to himself. Little did the wretches who propagated this story know the character of the man,—they must have levelled his morals with their own.

The fever ceased with the frost, but the medical war—" *bellum plusquam civile*"—retaining its heat without intermission, refused to freeze. It took on an exacerbation at every fresh invasion of the fever; nor did the pertinacious spirit thereof die out till all these feverish spirits had gone "where the wicked cease from troubling, and the weary are at rest." Meanwhile, the new method had finally triumphed, as proven by incontestable authorities whom we shall speak of in a subsequent page. Rush lectured and wrote, and turned his opponents into ridicule in the exercise of his professorial office; he published histories of the fever of every year to 1805, wherein he set forth his opinions and the success of his practice, denouncing, at the same time, that of his enemies. But these were now silent; they had become paralytic; their nervous centres were softened; they were now withering away, and not unwilling to be forgotten in relation to their inglorious war.

Rush had now raised himself to a very high stand in the temple of fame. His name was quoted with admiration wherever medical science was known. He had been made a member of most of the scientific, literary, and beneficent societies of his country; and similar honors had been conferred on him from abroad. He had obtained a most signal triumph over his enemies: he had established, *as he hoped*, a permanent method of treating the yellow fever, as also the salutary doctrine of domestic origin and non-contagion; he enjoyed the hope of con-

firming this doctrine in the minds of his future classes. One thing only seemed to be wanting to his happiness, and that was what comes home to the heart of every sensitive physician, his brethren's friendship. This had been sacrificed to the quiet of his conscience. Like his great prototype, Sydenham, he had resolutely pursued the path of duty, and trusted to a good Providence that it would lead him to a good end. Nor had he any fear of the final judgment of men, knowing that his methods were founded in reason, and that they had proved successful. Posterity, he says, "is to the physician what the day of judgment is to the Christian;" and though the rewards of this afford no present help but faith and hope, these were enough for him, these supported Sydenham and Rush.

It has been sneeringly asked, why this man had enemies. The question may be justly answered with an equal sneer, that no good man, who faithfully acts a public part, is without them. It does not appear, however, that Rush was thus distinguished before the epidemic of 1793; for in his history of this, he speaks of having always lived in harmony with his brethren. It is a melancholy fact that any man of distinction, who nobly avows unpopular opinions conflicting with the accumulation of either public or private wealth, will bring upon himself a host of enemies. Such was the fate of Rush in a pre-eminent degree. He was the first to proclaim the yellow fever indigestion, and he did this almost from the very beginning of the first epidemic. Now, the merchants of every city are the most powerful body, and they infuse their spirit into all the various mechanics and laborers who must be always in their employ. That the new doctrine would draw upon its author the malice of these people, was no doubt what he foresaw, and therefore his resolute spirit is entitled to the highest praise. He sought his own approbation rather than fame or wealth; he preferred

"The peaceful night, the self-approving day,
Unstained fame, and conscience ever gay,"

"to all the yellow sands of the Tagus, and to all the gold that is rolled into the ocean."*

The malignants of a community who happen to be offended by a physician, begin their attacks by undermining his professional skill. This is the doctor's vulnerable part, for he cannot defend himself without violating propriety. Upon Rush, then, who had invented a method of treatment which appeared extravagant, adapted, as he thought, to an extravagant disease, they made their attacks with no little advantage. Their audacity was favored by the venal Cobbett of the "Porcupine Gazette," and carried on with such success as to injure, for a short time, the Doctor's private affairs. But his pre-eminent abilities and prudence carried him with dignity through all his persecutions, and soon won over to his friendship many of his enemies. A few of his medical brethren, and some of his colleagues in the University, never forgave him; thus proving the maxim, which Tacitus appears to have adopted from Seneca, that men always hate those they have injured. In their hatred, however, there was supposed to be a spice of envy, for he had left them far behind in the respect of mankind. His fame had gone triumphant through all the nations of Europe, while they, for the most part, could see the circumscription of theirs from the tops of their houses. Horace says that poets are an irritable people; the same may be said of the physicians of that time; they might well have prayed in the words of the Litany, to be delivered "from envy, hatred, malice, and all uncharitableness."

That Rush escaped without irritation, is not to be supposed; but certain it is that he carried himself with becoming dignity and grace, thus proving the supremacy of virtue. He probably followed the advice of St. Paul,—was very angry but sinned not.

We have said that in 1791 he was made Professor of the In-

* *Tanti tibi non sit opaci*

*Omnis arena Tagi quodque in mare volvitur aurum,
Ut somno careas, ponendaque præmia sumas.*

JUVENAL, III.

stitutes and Clinical Medicine in the University. In this office he continued ; and he filled also the chair of Practice resigned by Dr. Kuhn in 1797, though not formally elected by the Trustees till 1805. In this triple professorship he continued the rest of his life, lecturing an hour every day, and towards the end of his course, an hour in the morning and one in the evening. His lectures, with his busy practice, his attendance at the hospital, his numerous consultations and correspondence, his hospitalities and unseasonable visitors, his studies, and his frequent publications,—these constituted the business of this much-occupied man during his old age ; yet he went through the whole with proverbial punctuality, and even without any apparent haste, for he said that a physician should never be seen in a hurry. In a letter to Dr. Ramsay in 1803, he says, “I continue, through Divine goodness, to enjoy, in the fifty-ninth year of my age, uncommon good health ;” and in one to Dr. Finley in 1809, he observes, “In my sixty-fifth year I continue to enjoy uncommon health, and the same facility in studying and doing business that I possessed twenty-five years ago.” And about six weeks before his death, he says, in writing to the same, “I continue to enjoy uncommon health for a man in his sixty-eighth year. Now and then I am reminded of my age by light attacks of the *tussis senilis*, but they do not impair my strength, nor lessen my facility in doing business.”

He was, indeed, though delicate and frail in appearance, a vigorous, animated old man, whose mind neither knew nor desired repose. He was never absent from his daily routine ; of this he never tired ; for if fatigued with bodily labor, conversation or books were a certain refreshment. He never sought relief in the country from the heat and impurities of the city ; he had a country-house for his family, and called it “Sydenham,” but for himself he was always at home, and a ready help to his patients : even his father’s house, with all the sweet attractions of the “*natale solum*,” he did not visit from his sixth to his sixty-eighth year, and not then till brought into its neighborhood by visiting a patient. Justly has he concluded his Introductory Lecture for 1808, when he says, in allusion to his

death, "when that time shall come, I shall relinquish many attractions to life, and among them, a pleasure which to me has no equal in human pursuits, I mean that which I derive from studying, teaching, and practising medicine." His chief happiness consisted in doing good, and the plenitude of it in discharging his medical duties.

He had never been what is called robust. In early life, he had slight hemorrhages from the lungs, whence it was only through unceasing care, and the occasional use of bark as a tonic, that he escaped, as he thought, an early consumption; for he says that he had a hereditary predisposition to this disease. During several of his last years, he had a slight cough, the *tussis senilis*, and this increased during the last winter. Fearing some latent inflammation, he took less animal food and omitted wine, though his labors in lecturing, attending the hospital, and examining the graduating students several hours a day, were very severe for an old man. The typhus pneumonoides, moreover, appeared in March, and gave him, most inopportunistically, an oppressive increase of business. Thus, by incessant exertions of body and mind, now debilitated by cough and low diet, he became an easy prey to the prevailing fever; a disease from which the most robust of old people are in great danger.

His friend, Dr. James Mease, visited him the night of the 14th April, 1813, and found him with a pen in his hand. "What, Doctor, always at your studies?" He replied, "I am revising a lecture, for I feel every day more and more like a dying man. I am not indisposed, but I deem life, at my age, particularly precarious, and I am anxious to leave my manuscripts as perfect as possible." At nine o'clock he was taken with a chill, and went to a warm bed, where he spent a feverish night, with pains in his limbs and side. At daylight, perspiration broke out and the pain in his limbs subsided, but that of his side became more severe. A bleeder then took ten ounces of blood, with decided relief, and his colleague, Dr. Dorsey, was called. He approved of what had been done, but considering the importance of the patient, he desired a consultation, whereupon Dr. Griffiths, who had long been his intimate and steady friend, was

selected. He remained the rest of the day, as also the next day and night, with a slight fever and some pain in his side, but only on taking a deep breath. Dr. Dorsey attended him, but what was done is not said. Dr. Griffiths had not been able to visit him.

Saturday morning he awaked with an acute pain in his side, and Dr. Physick was called in consultation. Three ounces of blood were taken from his side by cupping, which relieved him so much that he fell into a comfortable sleep. On Sunday morning he awaked so well that his physicians pronounced him apparently free from disease. Dr. Physick said he was doing well, and that nothing appeared necessary but food. He probably entertained different thoughts himself, for it was this day that he gave much advice to his son, Dr. James Rush, and particularly with respect to his attending certain families without charge. His intimate friend, the venerable Bishop White, visited him this day, and prayed with him at his request, Rush himself quoting from St. James,—“the fervent prayer of a righteous man availeth much.”

The physicians both saw him at five o'clock, and found him feverish ; “at nine o'clock, they became at last alarmed,” and enjoined active stimulation. This was maintained through the night and the next day, as long as there was any hope. His wife saying to him that he was in a fine perspiration, he promptly answered, “it is an unfavorable symptom,” and soon added,—“my excellent wife, I must leave you, but God will take care of you.” Then clasping his hands, he prayed audibly from the Episcopal litany,—“By the mystery of thy holy incarnation ; by thy holy nativity and circumcision ; by thy baptism, fasting, and temptation ; by thine agony and bloody sweat ; by thy cross and passion ; by thy precious death and burial ; by thy glorious resurrection and ascension ; and by the coming of the Holy Ghost, blessed Jesus, wash away all my impurities, and receive me into thine everlasting kingdom.”

What little he spoke afterwards could not be understood ; he became gradually comatose, and easily quitted his earthly tenement at five o'clock in the afternoon. The above account

of his sickness and death, is extracted from his widow's letter to Dr. Mease, and from the letter of this reliable man to Dr. Lettsom, both published in "Thatcher's Medical Biography." Something was obtained from his son, Dr. William Rush, and from "Rees's Cyclopædia." Dr. Mease had been his pupil, had grown old in his friendship, and had nursed him through the whole of his last day, the 19th of April 1818.

The sensation throughout the whole country was intense. Every one had heard of Dr. Rush, and all that were interested in medicine or philosophy, in common humanity or in the honor of their country, felt they had lost a friend and benefactor. "From one end of the United States to the other," says Dr. Charles Caldwell, "the event was productive of emotions of sorrow; for, since the death of Washington, no man, perhaps, in America, was better known, more sincerely beloved, or held in higher admiration and esteem. . . . For nearly three thousand years past, but few physicians equal in greatness have appeared in the world, nor is it probable that the number will be materially increased for ages to come."* Jefferson, writing to John Adams, said: "Another of our friends of '76 is gone, another of the co-signers of our country's Independence; and a better man than Rush could not have left us, more benevolent, more learned, of finer genius, or more honest."†

The members of the African Episcopal Church, of which he had been the active first promoter and steady friend, also other negro churches in the city, asked permission to precede his body to the grave; and it was followed by a greater concourse than had ever been seen at a funeral in Philadelphia. He was buried in Christ's Church graveyard, by the side of his parents, and next to her whom he has called upon her tomb the best of mothers. In the same grave, now overhung by two weeping willows, his widow, at the age of ninety, was buried, after having survived him thirty-five years. The appropriate

* Delaplain's Repository, Life of Dr. Rush, by C. Caldwell, M.D.

† Cyclopædia of American Literature, I, 265.

quotation engraved on his tomb, is not read by the pious mind as a mere eulogium, but is felt as the present echo of the Saviour's salutation in Heaven,—“Well done, thou good and faithful servant, enter thou into the joy of thy Lord.”

We have now travelled with this illustrious man through his long life, most fruitful, as it must have been, of conversations, incidents, works; and the reader is, no doubt, surprised, as well as the author, that we have gathered so few memorable sayings or domestic facts. This certainly is not what we expected to fail in when we undertook this memoir. Rush left a large volume of autobiography, but whether it was written for the world at some distant time or for his family only, is not publicly known. Meanwhile, all who were old enough to be his companions are dead; and his conversations, with all the anecdotes of his private life, the very essence of biography, have perished. Had the *Life of Johnson* been delayed forty-seven years, we should have learned but little of his conversation and habits. His “bow-wow way” in talking would not be known, nor would Miss Williams or Bozzy or Piozzi have a place in history; even the good Dr. Levet would lie buried in the dusty leather of the *Gentleman's Magazine*, and Mrs. Hodge, the cat, with her oyster suppers, would have perished forever, instead, as Virgil says, “of flying through the mouths of men,” and mewing the praises of her kindhearted master.

In reviewing the career of Dr. Rush, in attending his last four courses of lectures, in perusing his writings, in having conversed much with some who had known and observed him closely, and with the children of these, we are, perhaps, as strongly impressed with his real character as any man living can be. But it is difficult to portray the mind, and should we attempt it in this case, we would possibly descend to eulogy; we would, therefore, rather state facts, which generally show the real man.

His piety began early, and there is every reason to believe it was deep and habitual: this was the steady opinion of all his pious acquaintance which was very extensive. In his

earliest writings, he was careful to evince his belief in Christianity; and in all his works, in his lectures, and in his intercourse with the world, piety and benevolence are manifest. Whatever he says in this way appears to be the overflowing of a fervent mind, without the least semblance of cant or hypocrisy. He seldom passed a Sunday without going to church. If he could not reach his own, he went to any other which was most convenient in his drives through the city. It was plain to those who knew him that this was an act of duty, but his enemies twisted it into a craving of popularity; this it could not be, for he continued it in his old age, when he had become indifferent to public favor. He probably learned this charitable practice from his preceptor, Dr. Redman, whose biographer says, "he was a stranger to bigotry, often worshipping with sects that differed in principles and forms from his own." Rush preferred the Episcopal Church, hence Bishop White was the only clergyman who saw him in his last sickness; but he went most frequently to the Presbyterian, because his wife was of that communion. He was, however, a true cosmopolite in this respect, and ready to countenance sincere religion in every church, considering public worship and the observance of the Sabbath as truly made for man. In his "Address to Ministers," he says, "If there were no hereafter, individuals and society would be great gainers by attending public worship every Sunday. Rest from labor in the house of God, winds up the machine of both soul and body better than anything else, and thereby invigorates it for the labors of the week."

He frequently read the Bible to his collected family, and we shall see that he wrote a powerful essay in defence of using that sacred book in schools. He was a first mover in the cause of the Philadelphia Bible Society; he drafted its constitution, and he was a Vice-President from its origin till his death. He was perpetually making discoveries of wisdom in the Bible, and truths which had escaped others; he was, moreover, preparing to write a work on the diseases and cures therein described. So thorough was his faith in the Sacred Book that, finding both free

agency and predestination taught therein, he piously believed them both, teaching us every year that they were not inconsistent with each other. He said, "our illustrious countryman, Jonathan Edwards, has shown that, however strange it may seem, they are both true." In his lecture on the Pleasures of the Mind, he descants on the delights and comforts of this double and incomprehensible endowment, which gives to man a feeling of free agency, though he knows that all his volitions are governed by his benevolent Creator. He says, "we act most freely when we act most necessarily, and most necessarily when we act most freely." To this he might have added some notes of admiration.

His benevolence embraced all races and conditions of man. As early as 1771, he wrote two essays against slavery, and he was, with Dr. Franklin, one of the founders of the "Society for the Protection of Free Negroes." Of this he was annually elected President after Franklin's death. He was the first to move in the establishment of the African Episcopal Church, in 1792, which has immensely benefited the Blacks, and has done more good than any half dozen Caucasian churches in the city. It has not only done good directly, but it has been the promotion of negro churches of other denominations, all highly respectable and beneficial. It was his benevolence that led him to write a long paper of advice to immigrants; to write on public schools, spirituous liquors, tobacco, and many other subjects. Of his essays on ardent spirits and tobacco, he published very large editions, and sent them, at his own expense, to the clergy and others for distribution. It is plain, from the mere titles of his essays, that he wrote to benefit his fellow-men, not for posthumous fame; nor did he consult his present reputation, for he generally defended the unpopular side. Many striking instances of his benevolence are mentioned by his eulogists, but they all centre in the simple fact that he was ever ready to assist the poor and distressed with money as well as medical advice.

It has been said that he never charged the clergy: this is a great mistake which ought to be corrected, for it is fraught

with evil. In his Introductory Lecture for 1808, he excepts "the pious clergyman who subsists only on a scanty salary," but he does not excuse the rich, and we do certainly know that he charged these; we know, too, from the best authority, that one of them used to complain of the amount of his bills. In charging them, he followed Percival's Medical Ethics; and the American Medical Association have since settled the question that no profession is exempt, except on account of poverty.

His patriotism shone forth at the very beginning of our troubles with England, and it was ever after a very conspicuous trait in his character. He wrote much on the subject, and he must have been a warm patriot, or he would not have gone into Congress, as we have related above, for the express purpose of signing the perilous Declaration. There is, moreover, a certain Americanism that pervades all his works. He was, it must be confessed, a little too enthusiastic; he expected more from mankind than they were ready to do. The goodness and greatness of his own heart represented all men as willing and as able as himself, each in his proper sphere, and therefore he hoped that great things would be done in the new republic. As an instance of his enthusiastic foresight, he predicted, in a patriotic discourse, that merchant ships would be built at Pittsburg and freighted to Europe. This drew upon him the sneers of his enemies, nor were his friends pleased with what they called a mere flight of fancy. A little time showed them his foresight and their own dulness; he proved to be a Cassandra. It was not, however, the commerce and riches of his country that occupied his mind, but the wonderful expansion of intellect which he hoped had been caused by the collisions of the Revolution, and the establishment of a republican government. Sorrowful it is to relate that, towards the end of life, he found cause, in the violence of party and the venality of public men, to despair of that national happiness which had been the subject of his delighting reveries.

His industry had become a habit almost as much as the beating of his heart. In his Introductory Lecture for 1809, on the means of acquiring knowledge, he copies certainly from

his own life. He insists upon the students keeping a memorandum-book to be used "at all times and in all places: even when the pencil cannot be employed, a knot on the pocket-handkerchief will preserve an idea." He insists, too, that the student shall read pen in hand: this was his own practice, and hence the proofs of extensive reading his works afford. Every moment of his time seems to have been occupied to profit. He had well studied the first aphorism of Hippocrates "life is short, art long;" and he had been taught by Rittenhouse that time was of more importance than even health. Above all, perhaps, the Divine admonition sounded in his ears: "work while it is light, for the night cometh." His fatal sickness, as we have said, found him with a pen in his hand, revising a lecture for the use of posterity.

His punctuality and his industry went together as continual and faithful handmaids to each other. Notwithstanding his press of business, he never failed being in his chair at the minute; and it is said that, during his thirty years' attendance at the hospital, he was never known to be ten minutes after his time. In his valedictory to the class of 1810, he tells, with strong approbation, of a noble statesman who said that he would not disappoint the meanest of his tenants, if he had agreed to meet him only for the purpose of playing push-pin. He shows too, in this lecture, how punctuality facilitates not only our own business, but that of others also; and how greatly the want of this virtue frets and injures the sick, how it robs brother physicians of their time, and thus disorganizes the consecution of their several appointments. It is worth mentioning that Mr. Thomas Sully, the eminent artist, who took several portraits of Rush, told me that the Doctor never failed to be present at the appointed minute. Upon Mr. Sully's remarking this, the Doctor replied, "punctuality in other business enables me to be punctual here."

The characteristics of this great man in society are of course to be noted. Dr. Charles Caldwell, *Autobiography*, p. 281, says, "the resources of his amenity and courtesy were all but boundless, for he was among the most polished men of that

polished age." Dr. Dorsey says, *Eclectic Repertory*, Vol. III., "of all men I ever knew, Rush was the first in conversation." To this it will suffice to add the testimony of Dr. Caldwell from "*Delaplaine's Repository*:" "In colloquial powers he had few equals; and no one, perhaps, could be held his superior. His conversation was an attic repast which, far from cloying, invigorated the appetites of those who partook of it." The above traits have, we believe, been conceded by all who knew him. He delighted in conversation, considering it as one of the readiest means of acquiring correct knowledge; and he reminds us that Fox said, "he had learned more from conversing with Burke than from all the books he had read." He says, "except in cases of extraordinary pride, I believe taciturnity, in nine cases out of ten, in civilized company, is the effect of stupidity." He makes an exception, however, to this rule in favor of those who write much for the press.

He was noted for his total freedom from ostentation, and all pretence. His demeanor was perfectly natural, simple, and easy. Through the whole course of his lectures, we knew him only as the gentleman, philosopher, and physician. He never adverted to his services in the army or the senate, or to his friendships among the great. He spoke of certain physiological observations made by officers, the dreadful nights before the battles of Trenton and Princeton, but he did not say he was there. All such things, of which most public men avail themselves in their ostentation, he forgot or passed by with contempt. In the title pages of his books, he omits all his memberships; what others find so necessary and useful, he must have looked upon as indecorous to him.

He despised all singularities, asserting that men truly great are distinguished by going before others, and not on one side of them. This he says in relation to subscribing a name illegibly, or in disguise; a fashionable and troublesome folly, that he treated with contempt, as "generally characteristic of a frivolous mind." He wrote a very legible and fair hand, and he urged the practice of this on his classes every year; saying, that "to read or rather decipher the letters of young physi-

cians, who apply to their superiors in age and experience for advice, often requires more study than to answer them."

It has been matter of wonder to many that he found the leisure necessary to the general reading, so apparent in his conversations and works. One cause of his manifold information lies in a rule that he adopted early,—to exclude all useless, false, and pernicious learning. "The understanding," he says, "should refuse admission to everything that is not in unison with truth and utility; in this way, Dr. Johnson acquired his stupendous mass of knowledge." At the head of his expurgatory index, he placed the pagan theogenies, the study of which he considered not only as a waste of time, but as highly immoral in its tendency. Happy, indeed, would it have been for modern literature, had some authoritative scholars set forth this doctrine, before the vernacular languages came into use in modern poetry. The pagan machinery must be tolerated in translation, but it makes no impression on our modern nerves; the reader passes it over with frigid indifference, with the *incredulus odi* of Horace, and hurries on to find something true in nature, to which his own nature responds. Blair thinks that Homer's description of Jupiter's nod is truly sublime. Such it no doubt was to the ancient vulgar, but such it cannot be to a modern educated reader. It is this affectation of ancient folly that mars the *Lycidas*, the *Windsor Forest*, and even the *Messiah*, where Pope condescends to be Virgil's parrot, invoking, he knows not what,—the Nymphs of Solyma. Dr. Warton, editor of Pope, Vol. I., tries to defend this pagan folly of the *Windsor Forest*; but suppose that a Philadelphia poet should represent Father Schuylkill, raising his "reverend head from his oozy bed," surrounded by his "sea-born brothers,"—Wissahickon, Perkiomen, Tulpehocken, and the God of the Navigation Company, then making a speech in praise of the city, would not this poet be considered as needing a blister on his head?

But Dr. Rush strongly advised the reading of those poets, who copy from nature and truth. In these he found many illustrations of the secret workings of the mind, and his per-

petual intercourse with the world, showed him their truth and their utility in medicine. He says, "they view the mind in all its operations, whether natural or morbid, with a microscopic eye, hence, many things arrest their attention which escape the notice of physicians." He objected strongly to the reading of novels, saying "they should be considered as offal matter, and carefully rejected by the student of medicine."

A great outcry has been raised on account of his essay on learning the dead languages, as though he wished them extinct. This was far from his thoughts, and in contradiction to his wish expressed in the essay; but it seldom happens that oppositionists set forth the whole truth. He wished these languages preserved, like the knowledge of law or medicine; that is, by a distinct profession, to be paid for their services. He makes another proposition also, that when it is found, about his fourteenth year, that a boy is destined to a profession, he may learn all the needful Latin and Greek in two years. And in his Introductory Lecture, on "The Medical Student's Preparatory Education," he mentions Latin and Greek among other things which, if neglected, ought to be attended to in the summer recess. "In the present mature state of your faculties," he says, "you will find no difficulty in acquiring them; and in so doing, you will add no less to your private honor and interest than to the credit of this University." Still, he thinks that both medicine and law may be acquired without these languages, and this he deduces very fairly from various premises, and from the fact that some of the greatest and most popular lawyers in America had never learned any but their native tongue.

Rush knew that modern languages could be written correctly without any knowledge of the ancient; he knew that one language can give very few rules to another; that the inimitable ancients did not perfect their style and their modes of thought by a seven years' study of dead languages, though they wrote with a vigor and polish that no moderns have attained to, even by studying *them*. He had, moreover, daily proofs that this study was not necessary to the development of mind. It was

not this that placed Rittenhouse and Bowditch among the stars; it was not this, as Turgot says, that "wrested the sceptre from kings and the lightning from the skies." And, had he lived to the present time, he might have seen that the study of words has not enabled us to hold converse with people in distant lands; has not covered our waters with steamboats, and our country with factories; has not lighted our houses from the bowels of the earth, and our cities with stars that vie with those of the skies. But amidst all these glories, he would have seen one sorry thing,—a country filled with smatterers in Latin, who pass with the people, for learned men; for it is truly wonderful how a "little Latin and less Greek," will recommend a man to the public: as Boswell relates that a minister was not esteemed by an old lady of his church, because he was not like his predecessor, a "Lutiner;" he did not quote Latin in his sermons.

Rush wished to multiply effective and prolific learning, something really useful, as he says, "in making the earth a more safe and comfortable abode to man." This was the professed wish of the great Bacon, the object set forth in all his writings as the ultimate end of true philosophy. Now Rush might have asked in triumph, what have the Bembos, the Porsons, the Bentleys done towards this attainment?

His opponents have unwisely retorted upon him that his own sons were taught the languages. It was not for him to render his sons singular, and to bring them, perhaps, into contempt with the sciolists in Latin. He was a frequent declaimer against ladies' thin shoes; he knew it would contribute to the health of his wife and daughters to wear Steuben boots as high as their knees, and he could have given them from his "Inquiries and Observations," a greasy prescription for making them water-proof; but he did not insist, he wisely left them, as he did his sons' education, to the fashion of the times. His reasoning, however, on this important subject, is both profound and acute, nor can it be justly appreciated without long and severe study, not by the superficial, but by those deeply learned in the languages, with minds naturally adapted thereto. Rush

underwent this study himself, for which he is justly entitled to our sincere gratitude and gravest attention; even the dreams, even the errors of such men ought to be regarded with kindness.

As a teacher, we cannot admit that he was not the delight and admiration of all unprejudiced minds. His lectures were always carefully written, and he read them seated in an elevated pulpit. They were revised every year, sometimes curtailed, oftener amplified; and so alive was he to every recent improvement, so cordially did he hail everything new, that he often raised his glasses to his forehead, and strengthened or elucidated his pages with something he had recently read, even in that morning's newspaper. Each of his colleagues read the same Introductory every year, but Rush, whose mind was a prolific hot-bed of thoughts, treated us every November with one entirely new. His subject was always something intelligible to the youngest student of the meanest capacity: would to heaven, that our professors of the present day had the wisdom to imitate him in this humility. They often dash into abstruse subjects, of which the young students are entirely ignorant, involving technical language which they never heard before; when the hapless men leave the house without having acquired a single idea, except that of a great man spouting as Hamlet says "words, words, words." As well might we begin Euclid in the middle and proceed either backwards or forwards, as the beginning student hear an introductory lecture on "life forces," or the enigmata of chemistry. In the volume of sixteen introductory lectures published by Rush in 1811, there are sixteen bright examples of these compositions. Every idea and every word is intelligible to the youngest student; there is much novelty, and many striking passages which caused the young men to prick up their ears and to look with hopeful expectation to the pleasures of the coming course.

His eloquence was very peculiar, and good judges have thought they never knew it surpassed. He had been when young an ardent admirer of Whitfield, and it is said by some who had heard them both, that he had caught the tones and

*always used
lectures*

cadence of that fascinating orator, whose eloquence compelled the parsimonious Franklin to open his purse, though predetermined not to give a penny. His voice was full and sonorous, strong and clear, so that he was easily heard in a large room of four hundred and thirty students even in his sixty-eighth year. Dr. Caldwell, not a friendly witness, says in his Autobiography that Rush was the best reader he ever heard. So great was the influence of his fine tones that if he saw any one, near the end of his lecture, now moving slyly towards the door, in order to be the first to scramble for a seat in the anatomical room, he would begin to read in his best manner, thus chaining every man to his seat; and those whose previous attendance apprised them that a glowing passage was soon to be read, were seen with the delights of expectation in their countenances. Sometimes his enthusiasm would seem to violate the sobriety of science, as when declaiming against nosology, he cried out, in imitation of Cato, "*delenda, delenda, delenda est nosologia.*" And when treating of debility as the predisposing cause of disease, he said, "I will associate this doctrine with an act which I hope will not be forgotten. Behold me then rising from my chair, imploring you by your regard for the lives of your patients, for your reputation, the peace of your conscience, and all that is dear to you whether in earth or in heaven, to regard debility as the predisposing cause of nearly all the diseases of the human body." He then prayed them to transmit this doctrine to their pupils, hoping that it would be the means of saving the health and lives of millions yet unborn. Few there are, indeed, who could have done this without incurring ridicule, but done by this accomplished actor and venerable man, it proved to be what he wished,—a solemn, impressive, and memorable scene.

He possessed, in the highest degree, the faculty of inspiring others with his own enthusiastic love of the art. In this, says Dr. Caldwell, Autobiography, p. 318, "he surpassed any other teacher I have ever known;" and in the next page he further says, "whatever amount of medical knowledge I possess, I frankly acknowledge myself much more indebted to him than to all other men, whether living or dead." That is, in-

debted to Rush, not so much for knowledge communicated, as for that inspiration of medical enthusiasm which made the study his future delight. The Doctor further says, "Delaplaine's Repository," Vol. I., "from his influence and example has arisen much of that enlightened energy and spirit of enterprise with which, for the last twenty years, medical science has been cultivated in the United States. What Boerhaave was to the school of Leyden and Cullen to that of Edinburgh, was he to the school of Philadelphia; an awakening spirit that threw the minds of the pupils into a state of action and research, which must accompany many of them to the end of their lives; shedding light on their paths and diffusing around them the works of beneficence." Rush clearly saw and highly estimated the value of the art he taught; he fervently loved it; he believed he was in the way of improving it greatly; he had reason to hope that his principles would be widely diffused by his pupils. Such thoughts, reacting on a mind of unbounded benevolence, could not fail to burst forth, as they often did, in language and sentiment that reached the heart.

Another characteristic of our teacher, was his high-toned nationality, which led him to think that the human mind had received an impulse from the collisions of the Revolution, and the establishment of a republican government. This plausible opinion has received no little confirmation from the wonderful development of mind by the tumultuous conflicts of the French Revolution; for, however much the actors therein are to be execrated, it must be confessed by all that the advancement of mind then made in France, has no parallel in history. Then, as the government of his country had been regenerated, and the collective mind ennobled, so he hoped that education and laws, domestic institutions and manners, even medical science would be changed for the better. Hence his writings on education and criminal laws; hence also a stream of patriotism was ever flowing through his lectures in the highest degree delighting to his youthful audience.

He has been ignorantly accused of trying to diminish the amount of medical education. Of this his candid and intelli-

gent hearers do certainly know that he was not guilty. No man ever held forth stronger inducements to long-continued study; always showing the advantages of a third course of lectures, and often saying for himself that he hoped to be a student as long as he lived. It is true he thought the time formerly given to pupilage, for instance his own nine years, might be greatly shortened by excluding nosology and much other useless learning. He thought, too, that by the acquiring of principles, and the using of reason more and memory less, much time might be saved, and the road to the doctorate made more easy and pleasant. The nosologists and those taught to prescribe for the name of a disease, he said had excellent memory but poor judgment, all which he used to illustrate with argument, anecdote, and ridicule, to the infinite amusement and satisfaction of his class. He always, however, treated Dr. Cullen with profound respect, and often expressed the sorrow he felt in opposing his doctrines. "Were it possible," he said, "for him to meet me in my study or my solitary walks, he would say, go on, my son, till not one idea be left of all my system of medicine; provided, only, that mankind be benefited by the work, and the science promoted we have loved and cherished."

Rush had intensely studied his principles, and no great man can be easily persuaded that he has studied in vain. He felt assured that his doctrine had given him a mastery in the care of health, and the cure of disease, which he did not possess before; and if this was already attained, what might not be expected from time, and the collaboration of other minds? Reasoning and principles in our science were his favorite theme; without these he thought it a degrading art; hence, in concluding his Introductory for 1809, he says, "medicine directed by principles, imparts the highest elevation to the intellectual and moral character of man. In spite, therefore, of the obloquy with which they have been treated, let us resolve to cultivate them as long as we live. This, gentlemen, is my determination as long as I am able to totter to this chair; and if a tombstone be afforded after my death, to rescue my humble name for a

few years from oblivion, I ask no further addition to it, than that I was an advocate for principles in medicine."

It has been objected to Rush, that he was a man of reasoning rather than facts, and that he did not keep pace with the discoveries in morbid anatomy. It is true he did not make this a primary subject of personal inspection; how could he amidst his many imperative engagements? He always, however, encouraged others to do it, while he, professor-like, derived to himself a profit from their labors. In exchange for this he gave them notoriety. He always referred to morbid anatomy in his lectures, quoting Bonetus, Morgagni, Lieutaud, Baillie, and every authority. As early as 1789, he urged the subject in his valedictory charge: "give me leave to recommend to you, to open all the dead bodies you can, without doing violence to the feelings of your patients." He gave the morbid anatomy of yellow fever from Physick and Cathrell; that of hydrocephalus, tetanus, hydrophobia, and insanity from his own observations. His doctrine and treatment of dropsy is derived from morbid anatomy; and though he was the first to show, that this long-known malady is a mere symptom of disease, his discovery has been lately claimed by an American, for the nosographers of France. His successful treatment of what was called hydrocephalus in children, was the result of his study of morbid anatomy; and those who were favored to hear his lectures, know well that he used the same anxious scrutiny into the cause of every disease, and of every symptom. We should like to know what great practitioner and professor, with equal engagements, has ever become eminent in morbid anatomy. That some men less profitably employed in other things, have done more in this department, we readily admit; but whether they have cured more patients than they have anatomized, might prove a grave and troublesome question. Rush had the wisdom to study what belonged to his own chair, and to profit by the labor of others, in the department precluded to him by want of time. Lighting his candle by theirs, he sent their light into distant lands, whither many of them could not send it themselves.

His alleged deficiency of facts is disproved by his writings, and had the excellent author of this unfortunate error been favored with a hearing of his lectures, he would have been more than convinced; he would have been subdued. His writings are loaded with facts, and so were his lectures—many original, and many quoted from the most reliable authors of all time. So desirous was he to appear as a man of facts that what he had called in his first editions *a theory of fever*, he finally named *outlines of the phenomena of fever*, because he thought it consisted of a series of facts, "obvious not only to reason, but in most instances to the senses."

As to his writings, the necessary limits of the present biography forbid an extensive examination, and therefore we shall confine ourselves to those which set forth his most prominent doctrines. This is truly an ungrateful task, as we shall not only have to omit the exhibition of much that is brilliant and beautiful, novel and useful, but also to express some disapprobation, when truly it would be more cordial to commend.

His "Inquiry into the cause of animal life," is a startling title which ought to attract the attention, and yet it appears to be misunderstood by some and neglected by many. Nothing can be more simple, nothing more useful in the metaphysics of Medicine. Rush, adopting the language of Brown, begins in reality at the very beginning, taking excitability and the action of stimuli thereon as a fact in nature; thus he finds a sure basis on which to rest, which the mere medical dialectician can never find. So Newton began his philosophy. Attraction and repulsion he was contented to take as mere facts, and without troubling himself *at first* about the cause of these, he traced them through all their operations in nature, and thus established the system of the Universe. He found no exception to them, and hence according to his third rule of philosophizing, he looked upon these principles as universal in bodies. Hence,

"That very law that moulds a tear,
And bids it trickle from its source;
That law preserves the earth a sphere,
And guides the planets in their course."

Thus Brown and Rush, seeing the effects of stimuli on living bodies, found the same effect from their action on bodies apparently dead; and as these bodies were divinely organized, they called this organism excitability; the effects of stimuli on this was life or excitement. The body then, in a state of suspended animation, is in the very condition of Adam before his lungs were stimulated by air,—it is dead. Air then being the first stimulus, the Creator breathed into his nostrils, “and thus excited in him animal, intellectual, and spiritual life.” The body is further stimulated by light, heat, food, drink, exercise, the pleasures of the senses, and the operations of the mind. All this is matter of observation, open to the senses, like Newton’s attraction and repulsion.

Whether this excitability is matter only or matter endowed with a spirit, Rush did not inquire; he did not distract his mind with things wisely placed beyond human intelligence. “It is not necessary,” he says, “to be acquainted with the precise nature of that form of matter, which is capable of producing life from impressions made upon it. Sufficient it is for our purpose, to know the fact.” The age of hypotheses with their dialectics had passed away, and Rush was too wise to neglect the method of Bacon, or to think of outdoing Newton by inquiring after the remote cause of the excitability of organized matter. So carefully did he avoid all slippery ground that he would not use Hartley’s questionable word *vibration*; he substituted the word *motion*, implying thereby that either the nerves must be moved or something pertaining to them, perhaps some elastic fluid therein contained,—but what in reality might be the mode of communication, he cared not. Thus he escaped the folly of hypothesis,—as the ether of Newton, the pre-established harmony of Leibnitz, the insensible vehicle of Wollaston and others, the infinitesimal elementary body of Hartley, with all the Platonic sophistry which these inflict on the reader.

He considered this simple view of life not only as a philosophical but even as a scriptural doctrine, and he supposed that it manifested to the human understanding the difference

between man and his Maker: for the Bible teaches that God has life within himself and that he has imparted it to one being only,—“For as the Father hath life within himself, so hath he given to the Son to have life within himself.”

The various states of excitability and excitement, their accidental relations to each other and to stimuli, are all accurately considered and luminously set forth in three lectures, which every one who would preserve health and retard the advances of old age, would do well to study both night and day. These show how a just and natural use of stimuli contribute to health and longevity; on the other hand how a prodigal, irregular, and disproportionate use of them, wears away the organism,—bringing on debility, disease, and premature death. Impressed then as he certainly was with the vast benefit this doctrine would confer on mankind, in relation not only to their present but to their eternal welfare, his expanding soul is enraptured with the view, and he exclaims,—I seem to hear his seraphic tones,—“by means of this doctrine, revelation and reason embrace each other, and Moses and the Prophets shake hands with Dr. Brown and all those physicians who maintain the sublime truth which he has promulgated. Think of it, gentlemen, in your closets and in your beds, and talk of it in your walks and by your firesides. It is the active and wide-spreading seminal principle of all truth in medicine.”

We must here guard the reader against considering Rush a materialist. It is true, he denied that an immaterial principle was necessary to a future state; for he said matter was as immortal as spirit, and that nothing could destroy it but the fiat of the Almighty. He thought a sound Christian might adopt either doctrine; but he said, “my education and my prejudices are in favor of immateriality.” Hence he says that God breathed into Adam, and excited in him—animal, intellectual, and spiritual life. This too is the doctrine of Brown. It would perhaps have been wiser and more philosophical also, to have treated of *the effects of stimuli on excitability*, and of *the various relations of each to the other*, without using the phrase, *cause of animal life*; but the subject was new, and ultimate wisdom was not to be expected.

We have already related that he said to Dr. Ramsay in 1789, "the system of Cullen was tottering; that Brown had brought forward some luminous principles but mixed with others that were extravagant; that he saw a gleam of light, &c." This was the time he succeeded Dr. Morgan in the chair of Practice and the beginning perhaps of those prolific meditations on the Brunonian system which led to his inquiry into the cause of life, and finally to another doctrine, not however a necessary consequence of it, *the unity of disease*. This wonderful vision may be thus explained. Excitement or life is a unit, and this can be accurately divided into healthy and morbid only; hence there can be but one disease, that is, morbid excitement. This position involves a huge universality which very few minds who have seen diseases, can at all comprehend; nor have we ever been persuaded that Rush himself had well-defined ideas thereof. We have always thought him most wonderfully entangled in the delicate web of his honest sophistry. He had hopes from it certainly, but perhaps not entire satisfaction; for continually urging his pupils to reason for themselves, he often prophesied of the improvements and changes they would make in his system. The division of excitement into healthy and morbid was incontestable, and may be sufficient for the declamations of an orator or the reveries of a poet, or even to a sober man in his closet who has never seen disease; while to one who has practised medicine, it is what Bacon calls an *idolum specus*, the notion of one who has lived his life in a cave.

His object appears to have been, to show the impossibility of ascertaining correct ideas and of making correct definitions of the various forms of morbid excitement; to show that diseases assimilate so intimately and are of so hidden a nature that no human perceptions can ascertain their precise relations; but all this he might have set forth without running into a paradox. To suppose that fever and spasm, a wart and a cancer, are one disease, is to offend common sense, which he himself has defined, "the perception of things as they appear to the greatest part of mankind." When this greatest part of mankind, then, through a long succession of ages, has assented to the evidence

of certain perceptions, the man who resists this, must bring his proofs.

But after having supposed there can be but one disease, he acknowledges six primary forms thereof,—spasm, convulsion, heat, itching, aura dolorifica, and suffocated excitement. Here he seems to make some retrocession which is satisfactory as far as it goes. But then comes his *unity of fever*. This old-fashioned disease is a convulsion confined to the bloodvessels, and therefore all fevers are a unit; they belong to one of the six primary forms of disease, they are all one convulsion. “However different the predisposing, remote, or exciting causes of fever may be, whether hot or cold succeeding each other, whether marsh or human miasmata, whether intemperance, a fright or a fall, still I repeat there can be but one fever. I found this proposition upon all the supposed varieties of fever having but one proximate cause. Thus fire is a unit, whether it be produced by friction, percussion, electricity, &c.” Fever then is a convulsion in the bloodvessels, and all fevers are one convulsion. Now it would be very hard to disprove this generalization. The most we can say is, that fever is not what has been called convulsion. But suppose it be granted that fever is a convulsion, and that we cannot distinguish between the convulsive excitement in gout and that of small-pox, yet surely the effects of these will show some difference. But he says the effects of all fevers are the same. Now in all his writings he considers typhus fever as secreting a contagion: this he disclaims for the yellow fever: here seems to be some difference in the effects. He compares fire to fever, as above said. Now it is the nature of fire to produce the same effects on the same bodies: things combustible it reduces to ashes, things soluble it melts, &c.; but the effects of many fevers on the human body are invariably distinct.

It has been said that every very great man has at least one kink in his head. That the great Rush, after having reduced all the diseases of the earth into a unit, should have described every distinct disease most accurately and minutely in his lectures on Practice, is one of the most inscrutable mysteries in

the absurdities of learning. That he had some faint conceptions or some mysterious reasonings which he could not convey to others, that he had hopes which cheered him in his benighted way, that like Brown, he saw "a gleam of light like the break of day now dawning upon him," must be conceded to this good man. It seems to us, however, that he could not have persisted much longer in this abstraction, for he was the very antipodes of those stolid mortals who are ashamed to change their opinions. He made a public sacrifice of his belief in the contagion of yellow fever; and as he still adhered to nomenclature, distinguishing and defining diseases with the utmost care, there is reason to think that a few years more would have taught him that his unity was an impracticable abstraction and that his "gleam of light" was a mere Will o' the wisp,

"Which oft they say some evil spirit attends,
Hovering and blazing with delusive light."

MILTON.

Such an acknowledgment would have made his lectures more popular and useful. The doctrine of unity, whatever he thought for himself, was not a necessary part of his integral system.

It must be noted here that every system-maker has equally failed. Boerhaave and Stahl, Cullen and Darwin, men of the greatest abilities and learning, have failed as did Rush in this conflict with nature. The Zoonomic philosopher expressed his hope that he had laid the foundation of a permanent system, "a beautiful edifice, which might not moulder, like the structures already erected, into the sand of which they were composed; but which might stand unimpaired, like the Newtonian philosophy, a rock amid the waste of ages." This rock was soon broken down and given to the winds.

These system-makers, however, profited greatly by their labors. They were led to scrutinize nature, whereby they not only acquired a more thorough knowledge of her mysterious ways, but they also gained superior astuteness in the contemplation of disease. In the same way did those profit who be-

came their devoted disciples and partisans. Nor have their theories been found detrimental to their practice, for experience triumphs over opinion at the bedside; a fact that is evident even in the writings of Sydenham.

His "Inquiry into the influence of physical causes on the moral faculty," is a most important paper, and one that ought to be studied by all who are capable of comprehending its truth and utility. The term "moral faculty" he adopts from Dr. Beattie. It has been called the "moral sense" by Rousseau; it is St. John's light, "that lighteth every man;" the "good dæmon" of Socrates; the "*lex vera atque princeps*" of Cicero; the "light within" of the Friends' Society. He shows how this important faculty is influenced through the mind and through the body by innumerable causes which are within the power of every one who has a strong will he can call his own. These causes are climate, food, drink, hunger, thirst, sleep, idleness, cleanliness, and many others. The doctrine he says "is calculated to beget charity towards the failings of our fellow-men; and thus our duty to practise this virtue is enforced by motives drawn from science as well as from the precepts of Christianity."

He then names philosophers and poets whose faculties cannot be contemplated without wonder, and adds, "that if the history of mankind does not furnish similar instances of the versatility and perfection of our species in virtue, it is because the moral faculty has been the subject of less culture and fewer experiments than the body and the intellectual powers. From what has been said the reason of this is obvious. Hitherto the cultivation of the moral faculty, has been the business of parents, schoolmasters, and divines. But if the principles we have laid down be just, the improvement and extension of this principle should be equally the business of the legislator, the philosopher, and the physician; and a physical regimen should as necessarily accompany a moral precept as directions with respect to air, exercise, and diet, accompany prescriptions for the consumption or the gout."

He then shows how the moral faculty is independent of all others, and that it may be cultivated and brought into use

though the understanding may be feeble or neglected. He says, "It must afford great pleasure to the lovers of virtue, to behold the depth and extent of this moral principle in the human mind. Happily for the human race, the intimations to duty and the road to happiness are not left to the slow operations or doubtful inductions of reason, nor to the precarious decisions of taste. Hence we often find the moral faculty in a state of vigor in persons in whom reason and taste exist in a weak or in an uncultivated state."

He concludes by insisting upon the utility of education in strengthening the moral faculty. "Virtue," he says, "is the soul of a republic. To promote this, laws for the suppression of vice and immorality will be as ineffectual as the increase of jails. There is but one method of preventing crimes and of rendering a republican form of government durable, and that is by disseminating the seeds of virtue and knowledge through every part of the state, and this can be effectually done only by the legislature."

Two years after this, he wrote an "Address to the Clergy of every Denomination," in which he embodied the most practical portions of the above Inquiry; showing in a strong light that philosophy may beget morality and even religion itself. His Introductory Lecture, moreover, for the year 1799, is a continuation of the same subject,—showing how greatly the intellectual faculties are influenced by physical causes. He says, "The degrees of vigor and the number and celerity of motions which the mind is capable of receiving by all the causes that have been enumerated, elude our present powers of calculation. Our inability to measure its attainments will be felt more sensibly when we reflect that knowledge and the intellectual faculties will mutually increase each other, to the latest period of our lives."

He then gives his class that comforting assurance which had, no doubt, been long present to himself and had been one cause of his own mental development. "It appears," he says, "that the enlargement and activity of our intellects are as much within our power as the health and movement of our bodies.

This lesson has often been obtruded upon us by the entertaining spectacles of learned pigs, dogs, and other animals."

As a practitioner, Rush escaped only by death from the malignity of his enemies, nor have they ceased to persecute his memory to the present day. When he was a young man, the practice of medicine was directed by English writers, who reigned alone till the invasion of yellow fever. Whether Rush questioned their authority with respect to bleeding before this period is doubtful; but now he found that a freer use of the remedy was necessary, and the dissections of Dr. Physick convinced him of this. Other physicians fell into his wake, and the practice was established in the minds of many. Physick, Griffiths, Barton, Cathrall, Currie, and others, all pursued his method and bled freely. The two last named published their experience without naming Rush as the author of their salutary measures. Barton was his enemy, and yet in his lectures and conversations—for the present writer was his private pupil—he readily conceded to Rush the praise of having invented the true method. That bleeding has not been so generally successful of late, is not an argument against its use in the last century; diseases change with time and so does the body. Even in 1798, Rush says there were many cases of the fever which would not bear bleeding; and in 1802, he relied upon moderate evacuations and sweating.

He did not bleed as freely in later times and in other diseases as many other physicians; Dr. Physick far outdid him in this particular, as we do certainly know from having seen their cups of blood year after year in the hospital. But Rush wrote, lectured, and declaimed in favor of bleeding, and thus brought himself into suspicion even among some of his best friends; all his declamation, however, was made in relation to English practice, as inadequate to the violent rapidity of American inflammation. Hence the imputation of bleeding too much was fixed upon him; and as "fame increases by travelling," he and his cups were outrageously caricatured.

His good name has been still more injured in another way. His perpetual praises of bloodletting instilled into many of his

pupils a sanguinary spirit, and these, being ungoverned by the experience of Rush, poured out blood as he never did, a practice that reacted sadly on the fame of the great master. Dewees and Physick thought themselves sometimes fortunate in their pounds of blood; these cases they reported to the credulous and delighted ears of Rush; he sent them to the world through his lectures and books, and thus they became the precedents of multiplied extravagance and mischief. This, the injured Rush did not live to know, or we should have had some additional chapters on the loss of blood. That he may, however, have sometimes carried a principle too far, is very probable, for much good is seldom attained without some evil. Ardently benevolent minds cannot leave death unresisted, nor would it be easy to prove that a homicide from bleeding too much is worse than the same misfortune from bleeding too little.

He has been often represented, not only as neglecting the *efforts of nature* in the cure of disease, but as using a standing expression of contempt for them—"turn her out of a sick-room as you would a noisy cat." This is true as far as it goes, but as it is not the whole truth, it becomes a falsehood. He always added—"in violent diseases and in those of feeble reaction, where she is doing nothing but mischief." No man ever attended to the indications of nature more closely than he. In the syllabus of his lectures, Part IV., he has a chapter "on the operations of nature in the cure of diseases, and of the danger of trusting her in such as are violent." A chapter also "on the advantages of observing the tendency of her operations in certain diseases." On this subject he used to descant very largely, pointing out numerous instances in which nature was to be followed in her efforts. In one of his notes to Sydenham, page 69, he says, that "however excessive or deficient nature may be in her attempts to throw off febrile diseases, she rarely errs in pointing out the manner or emunctory in or through which they ought to be discharged. The business of a physician is to follow her, but it should be with depleting or cordial medicines, in order to assist, restrain, or invigorate her." And

note, page 301, says, "One of the greatest attainments, and frequently the last in the practice of physic, is to know when to do nothing." In his Introductory for 1806 he commends the old precept, paraphrased from Hippocrates, that "no medicine is sometimes the best medicine," saying that it is of "the utmost importance and generally the last attainment of skill in a physician's life." In accordance with these precepts, he often and carefully inculcated that a portion of inflammation left after proper depletion, nature would safely wear away.

His noble independence in practice cannot be exaggerated; this was proverbial even among his enemies. In dangerous cases, therefore, he was resolute, determined to persevere in the right through evil report, regardless of his reputation. If he was resisted, he would propose a consultation or to give up the patient. This he often recommended to his class, assuring them that it would end to their advantage as well as to their peace of mind.

His treatment of phthisis has been most grossly abused and then misrepresented. Bleeding, salivation, and the stove-room, are said to be his radical remedies. It is true, he thought that in the United States this disease is generally caused by half-cured catarrh and pneumonia; that, in the beginning, it is a mere chronic inflammation, to be generally cured by the antiphlogistic treatment. Now, during this course, seclusion from cold is important, and a little mercury may not be injurious, if there is no hereditary predisposition,—a medicine fully admitted even by the renowned author of the "Chronic Inflammations." Rush alludes no doubt to these cases when he says, "a salivation generally succeeds in the recent disease."

He thought that genuine phthisis was always preceded by general debility, particularly in the bloodvessels; that it was always, in its onset, a disease of the whole system; that it was to be prevented or cured only by chronic exercise in the open air as a tonic. He spends thirty pages of his two essays (*Inquiries and Observations*, third edition), in the vehement enforcing of this opinion; and he says, too, that if there exist a medicine adequate to the cure, it will be found in the class of

tonics. He gives the signs of this predisposing debility, and thinks it may be counteracted by flying the causes, by the use of tonics, and long-continued hard exercise or labor in the open and dry air.

He recommends bleeding, it is true, when the disease is formed with high inflammation; and who, let me ask, does not? But though bloodletting, blisters, &c., did sometimes, as he says, effect cures, it is plain that he looked upon this treatment as merely preparatory to exercise; and as only palliative in the incurable cases. Sometimes it effected cures, as he was told, "in different parts of the United States." Let us add that we are rather incredulous of the reports of these unseen cases. Rush's ardent and benevolent mind rendered him very credulous with respect to the powers of medicine; he was earnest in the cure of phthisis, and like other men, not unwilling to believe any plausible story of the success of his own method. It is true, he thought he had himself made some cures by mercury, but here we must call to mind that the diagnosis was not then always certain, and that mere symptoms are often illusory. But respecting these cures, mark well what he says, after having set forth all his remedies except exercise: "*many of these under certain circumstances, I have said, have cured the disease, but I suspect that most of these cures have taken place only when the disease has partaken of an intermediate nature between a pneumony and a true pulmonary consumption.*"

He then begins to treat of exercise as almost the only hope. If we examine his two essays, we shall find that he spends thirty pages in vehemently trying to prove that chronic exercise in the open air is the only hope of a radical cure; and that all medical apparatus are either preparatory to this in hopeful cases or merely palliative in those that are desperate. This is the whole drift and spirit of his work, though passages are found therein where the good man in his medical ardor has admitted cures by salivation, &c., some perhaps real, some mistaken in the darkness of the age, others merely heard of, as he says, "in different parts of the United States."

But these two essays the Philadelphia physicians do not read. There has been held up to their view a frightful picture of a stove-room, a ghastly patient with a salivating mouth, some cups of blood, Rush now feeling the pulse and ordering more, Death grinning over his shoulder, saying, yes, yes; in the background is a coffin, in the distance a graveyard. From this they turn away affrighted, and refer you to a certain essay in the *North American Medical and Surgical Journal*, Vol. viii., written by Dr. Parrish, to whom they give the credit of changing this deadly practice. Now, wonderful to tell, Dr. Parrish, writing in 1829, represents himself as directly opposing Rush and his debilitating method, recommending chronic exercise in the open air as the only hopeful remedy! Not once does he allude to Rush as having published the same doctrine forty years before, first in 1789, then by repeated editions in Philadelphia and London, finally confirming it in his second essay in 1805.

It is certain that much mischief was often done by others through a rash and ignorant use of what they called Rush's method. In the year 1811, I was present when Dr. Parrish was descanting on the mercurial treatment, but he manifested a sorrowful ignorance of Rush's practice, saying that when there were vomicae, hectic, and night sweats, mercury was not a remedy. He might have been answered that in such cases it had not been recommended by Rush. Thus it was that his method was first abused by ignorance and then condemned. So general had this careless perversion of Rush's method become that Dr. Hosack, professor of Medicine in New York, taught the whole routine of the stove-room, bleeding, and mercury, without those reservations which Rush had been careful to make. This may be seen in the lectures left by him at his death, twenty-two years after the demise of Rush.

We could relate some horrible salivations perpetrated after Rush's death by very eminent professors of medicine on distant unseen patients, which may be added to many others that resulted in the defamation of the great master; thus he was loaded with the offences of others, though not broken down. In like manner his methods have been blamed for effusions of

blood that he would not have sanctioned: such is the tax this great man pays for his high position in the temple of fame. We must now quit this part of our subject, with the expression of our sorrow that this defence of Rush is necessarily too brief, and that it has not fallen to an abler head.

If it be inquired what Rush did for Medicine, we answer,—more than any other, except Jenner and Laennec—men rather fortunate than great,—more than the present generation of physicians can possibly comprehend; but whoever might attempt to show this, would have to deplore the want of his manuscript lectures, without which all he could say would prove defective and lame. He taught more correctly than Brown all that can ever be known of the causes of life, all that can ever be useful; and that here all further inquiry is stopped, that here the presumptuous mind is arrested—"thus far shalt thou go and no further." He taught how to reason on the correlations of excitability and stimuli, adopting all that was true in Brown's system, and carefully showing those errors thereof which have sadly deluded European writers.

Brown made war on nosology without entire success, because his system was complicated with errors; Rush entirely destroyed this mortiferous monster, and taught us to consider diseases in their mutual relations, their causes, combinations, conversions, translations. He showed the precipitate delusions which very often arise from the naming of a disease, and the blind, head-long practice sometimes resulting therefrom. Nomenclature, it is true, remains in part and must remain forever a necessary evil; but Rush ought to have the honor of showing its delusions with more success than Brown,—the honor of bruising some of the hydra's heads and of guarding posterity against the rest.

Two vehement attempts have been made since his death to revive the evils of nosology in America, but they have utterly failed. The principal reason adduced by these authors—Caldwell and Hosack—is the fact, cheerfully conceded, that system is found useful in the several departments of natural history, to assist the memory; but poor indeed must be that memory and utterly unfit for any profession, that cannot embrace all

diseases in whatever detail. But the nosologists cannot agree in their genera and species; moreover they must coin new names, as does Mason Good, from Greek, Hebrew, Chaldaic, Coptic, Arabic—all these to help the memory, that needs no help. Truly, there might be said of nosology what the poet says of vice,—

“Tis a monster of such hideous mien,
That to be hated needs but to be seen.”

Well did Rush exclaim from his pulpit,—“where was human reason when it was adopted, where was the mighty genius of Sydenham when he proposed it?”

Rush taught more clearly than any other the utility of attending to the remote, predisposing, and exciting causes of disease. He assiduously shows how men may pass through a long epidemic, fully possessed by the remote and predisposing causes, and yet escape an attack by simply guarding against the exciting causes. In no other book is this fact so strongly urged; it is the result of his meditations on the doctrine of life.

He carefully showed how far and in what states of the system nature is to be trusted—when she is to be encouraged and when restrained. Hippocrates says, “the physician is the servant of nature;” this was true in his time, but the art has been so far improved that nature is now the servant of the physician. He reasons and wills, which she does not. The dispute might be settled by calling them co-laborers, “each needing the help of the other,” as Sallust says of the comparative value of mind and body in war. Rush taught that diseases of violent reaction must be brought down to a level with nature’s salutary efforts; that in those of feeble reaction, the system must be raised to the same point; that in diseases, however, where she was doing nothing but mischief, she was to be counteracted entirely. The careless or perverse reader is apt to think that his whole treatment consists in lowering or raising the system, in adding to, or in taking from—the *prosthesis kai aphairesis* of his Coan master. Even Dr. Ramsay, Eul. p. 21, is guilty of this un-

pardonable error ; and if this able man could make such blunders, what may not be expected from common minds ? To correct this error, it is only necessary to look into Rush's syllabus of Therapeutics.

He taught more clearly and urgently than any other to distinguish diseases and their effects. Inflammation was called a disease ; he called it an effect of disease, *error loci*, red blood in serous vessels ; hence he escaped all the self-tormenting unprofitable folly of inquiring, what is inflammation ?—a question that can never be answered. To go behind this *error loci*, inquiring into the mysteries of the formal cause, must forever be vain ; as well might you inquire, as Newton vainly did, what is the cause of attraction and repulsion. Almost every disease destroys by some ascertainable effects, very seldom does any annihilate directly the excitability ; and as the principal deadly effect of fever is inflammation, to prevent this he summoned his utmost energy. He had learned from a French writer two words, of which he made frequent use,—centrifugal and centripetal ; hence all his hopes in yellow fever and other centripetal diseases were placed in timely depletion, or revulsion, or in changing the deadly excitement by mercury. Here is one of the diseases in which the physician is the master, his reason directing ; nature is the servant, acting by necessity and of herself doing nothing but mischief. Had Rush lived to see Broussais's book, he would have hailed the pathological portions thereof with delight, his entire medical soul harmonizing therewith.

He has done much service to medicine by teaching that debility is to be looked upon as a predisposing cause of disease. In this he departed from Brown, who considered predisposition as the beginning and part of the disease itself, and that the causes thereof are the same that cause the disease. If it be argued that Brown is right, as shown by contagion, we answer, no ; for even here, debility predisposes to an easy infection. Nor was Rush so stupid as not to teach that the remote cause is often so strong as to seize upon the robust, as does contagion, thus being at once the remote and predisposing and

exciting cause. Brown's *predisposition* appears to be the *irritation* of later times.

He taught the peculiarities of American diseases, showing that we are not to be guided wholly by English books. He found the Philadelphia constitutions similar to those of London in the 17th century, hence he drew his practice from Sydenham. From him he learned to distinguish debility from depression; and as this last is a frequent symptom in our fevers, he lectured on it with great care and effect. This is one of the most difficult of diagnoses, requiring much experience and precarious ratiocination; nor will these secure the anxious doctor from error in every case. Nothing in the cure of fever shows so strongly the truth of Hippocrates' first aphorism,—“life is short, the art long—judgment is difficult—opportunity fleeting—experiment dangerous.” Rush amplified and elucidated what he had learned, certainly bringing forward more for serious consideration than any other writer.

It is impossible to set forth in this brief biography all that he did for medicine; but we must not omit to state the great impulse he gave to the study thereof in his own country. It was his greatness in teaching and writing that brought students from great distances to Philadelphia, and made this city the metropolis of medical science in the United States. They came, they admired, they loved, they believed. When Charles Caldwell came from Carolina in the year 1792, a talented, hopeful, aspiring youth, he looked with ineffable contempt on all the introductory lectures, except that of Rush. This filled him with medical enthusiasm and even with the hope of raising himself to the same bright eminence. We have referred above to Caldwell where he says, in his eightieth year, that he had profited more from Rush than from all other physicians, whether living or dead; not so much, however, in the amount of learning as in the cultivation of his medical mind,—his greatest comfort during a very long, ambitious, and laborious life.

The fame of Dr. Rush was such as to make him a member of nearly every medical, literary, and beneficent institution in his country; he was distinguished also by many honors from

Europe. He was a member of the Society of Arts and Sciences of Milan, of the Society of the Naturæ Curiosorum, of the National Institute of France, of the School of Medicine of Paris; he was created LL.D. by Yale College, was Treasurer of the United States Mint from 1799 to his death, when, in memory of him, the office was given to his son; thus it remained in his family thirty years, through the official terms of four Presidents.

He was addressed by the Prussian Government on the subject of yellow fever, receiving from the king a coronation medal, as a compliment for his answer.

He received the thanks of the King of Spain for his answer to queries on the same subject.

He received a gold medal from the Queen of Etruria as a mark of respect for his medical character and writings.

The Emperor of Russia presented him on the same account with a costly diamond ring.

His writings are numerous, and may be very conveniently set forth here in four departments, showing in what state they were originally found in the book stores.

§ I.

Between the years 1789 and 1804 he published five volumes of what he entitled Medical Inquiries and Observations. Of these he printed in 1805 a second edition in four volumes, in 1809 a third edition in four volumes, and they have often been reprinted since his death. They comprehend the following:

Vol. I. An Inquiry into the cause of animal life.

Natural History of Medicine among the Indians of North America,—read before the American Philosophical Society in 1774.

Inquiry into the influence of physical causes on the moral faculty,—read to the Philosophical Society, 1786.

On the influence of the American Revolution on the human body and mind.

An Inquiry into the relation of tastes and aliments to each

other, and into the influence of this relation to health and pleasure.

Result of observations made on the diseases of the military hospitals during the revolutionary war.

An Inquiry into the effects of ardent spirits on the body and mind.

Observations on tetanus.

On diseases caused by drinking cold water.

On the cure of several diseases by the extraction of decayed teeth.

Upon worms and anthelmintic medicines.

On arsenic in the cure of cancer.

An Inquiry into the cause and cure of sore legs.

Observations on the duties of a physician and on the methods of improving medicine.

On the state of the body and mind in old age.

Vol. II. On the climate of Pennsylvania.

Two essays on consumption.

On the cause and cure of dropsies.

On internal dropsey of the brain.

On the cause and cure of gout.

On the cause and cure of hydrophobia.

On the cause and cure of cholera infantum.

Observations on cynanche trachealis.

Account of the remitting fever of 1780.

An account of the scarlatina in 1783 and 1784.

On the measles of 1789.

Account of the influenza in 1789, 1790, 1791.

Vol. III. Outlines of the phenomena of fever.

His various histories of the yellow fever in Philadelphia, from 1793 to 1796.

Vol. IV. Histories of the yellow fever in Philadelphia, from 1797 to 1805.

An account of the measles in Philadelphia, 1801.

An account of the diseases in Philadelphia, from 1806 to 1809, inclusive.

An Inquiry into the various sources of summer and autumn-

nal diseases in the United States, and the means of preventing them.

Facts to prove yellow fever not contagious.

A defence of bloodletting.

An Inquiry into the comparative state of Medicine in Philadelphia between the years 1760 and 1809.

§ II.

A Volume of "Essays, Literary, Moral, and Philosophical," originally published in the periodicals of the day; collected and published in one volume 1798, and frequently republished. The volume consists of

A plan for establishing public schools in Pennsylvania, and for conducting education agreeably to a republican form of government, 1786.

Of the mode of education proper in a republic.

Observations on the study of the ancient languages, with hints of a plan of liberal instruction without them, accommodated to a republic.

Thoughts on the amusements and punishments proper in schools.

Thoughts on female education, accommodated to the present state of society, manners, and government in the United States.

A defence of the Bible as a school-book.

An address to ministers of the Gospel of every denomination, upon subjects interesting to morals.

An inquiry into the consistency of oaths with reason and Christianity.

An inquiry into the consistency of the punishment of murder by death with reason and revelation.

A plan of a Peace Office for the United States.

Information to Europeans disposed to migrate to the United States.

An account of the progress of population, agriculture, manners, and government in Pennsylvania.

An account of the German inhabitants of Pennsylvania.

Thoughts on common sense.

An account of the vices peculiar to the Indians of North America.

Observations upon the influence of tobacco upon health, morals, and property.

An account of the sugar-maple tree of the United States.

The life and death of Edward Drinker, aged 103 years.

Remarkable circumstances in the life of Ann Woods, a woman of 96 years.

Biographical anecdotes of Benjamin Lay.

Biographical anecdotes of Anthony Benezet.

Paradise of negro slaves—a dream.

Eulogium on Dr. Cullen.

Eulogium on Rittenhouse.

§ III.

Six introductory lectures published 1801, to which ten others were added and published 1811.

Medical Inquiries and Observations on Diseases of the Mind, one vol. 1812.

The Works of Sydenham, Pringle, Cleghorn, and Hillary, he published the last three years of his life, with original notes.

No portion of his MS. lectures has been published since his death.

§ IV.

Sermons to young men on temperance and health, 1770.

His two essays against negro slavery, 1771.

His numerous contributions to medical journals.

The same to the newspapers and magazines of the passing time on literary subjects; during the war on politics and the establishment of the General and State governments. Among

these may be noted his four letters to the people of Pennsylvania on the Constitution of 1776; also his vehement denunciation of the Test Law.

A highly interesting and instructive memoir of Christopher Ludwick, baker-general of the revolutionary army, republished by the Charity School Society of Philadelphia.

It does not appear that Rush was ever ambitious of the elegant style of professedly literary men; perspicuity and vigor were enough for his purpose, and these are all that he appears to have sought. In pursuing these, however, he attained, and that very early, a style of uncommon beauty and various excellence. He used to commend Swift as the best model for general use; but if he took this fluent and careless writer for his own imitation, it must be confessed that he greatly surpassed his master in polish and grammar. Rush's style is natural and easy, fluent and perspicuous, lively and vigorous; his idiom is pure, for he knew enough of both ancient and modern tongues to guard himself against impurities in our polyglot English. He never introduces new words nor does he fantastically modify old ones, as some of our medical authors now do; but taking the language as others used it, he found it sufficient to all his ideas and to all his notions of beauty. He makes no struggling attempts at elegance, shows no ambition of plucking flowers on Helicon; yet the mere fervor of his subject sometimes makes him highly eloquent, apparently in contrariety to his own intentions. All who heard him read these passages in his natural unpretending manner, must now say, as *Æschines* did of *Demosthenes*, "had you heard him."

In every work of his there is much to praise and little to blame; his beauties are many, of deformities he has not one. As *Johnson* wrote on *Goldsmith's* tomb, *nihil quod tetigit non ornavit*, whatever he touched upon he was sure to adorn; hence his works abound in what *Lucretius* calls the *aurea dicta*, those golden sentences which every reader of taste will stop to admire and even commit to memory.

*"Floriferis ut apes in saltibus omnia limant
Omnia nos itidem depascimur aurea dicta,
Aurea perpetuâ semper dignissima vitâ."*

In all his writings, his resolute and fearless mind was generally admired ; and it does not appear that he wrote for either present or posthumous fame, but for the present benefit of suffering humanity. This he did with a fearless mind, for many of his startling and novel thoughts, such as are sure to offend, and are therefore suppressed by the timid and wary, were published by him in Philadelphia while yet a young man and a candidate for popular favor. Some affect to look upon his novel thoughts as rather superficial; to this he himself would not have objected, for it was his opinion that many truths which have often been sought for at great depths, are not unfrequently found on the surface : as a great writer says, "the reader of the Seasons wonders that he never saw before what Thomson shows him, and that he had never felt what Thomson impresses," so the student is surprised to find that what he had sought in vain by the deepest reasoning, is shown by Rush as obvious to common perception.

But what is above all other fame, there runs through his works, and did through his lectures, such a vein of humble piety and cordial devotion as must have impressed many a youthful, careless, or doubting mind with the truth of Revelation, and thus have sown the seeds of faith, to spring up and ripen their fruit through all succeeding time. Of such it is said by Divine authority, "they shall shine as the brightness of the firmament, and as the stars forever and ever."

As there are many readers who see only the beginning and the end of a book, we have postponed the following important subject to the last page. It is asserted in "*Le Dictionnaire des Sciences Médicales*," Vol. XV., 346, that Rush acknowledged when dying he had always believed the yellow fever to be con-

tagious, and that he had taught the contrary doctrine for reasons known to himself (*considérations particulières*). The author says, "we have this anecdote from credible witnesses, of whom it is sufficient to name M. Moreau de St. Méry." This slander was eagerly caught at by the archcontagionist Chisholm, and trumpeted in great triumph through Europe. Where De St. Méry got this fable, it is not stated. Dr. La Roche says that he resided in Philadelphia about the year 1800; that he returned to Europe long before Rush's death; that he afterwards held some office under Napoleon at Parma; and he justly wonders how this man could have got information from this death-scene which had never reached any neighboring ears, not one even of his enemies having ever insinuated this hardy falsehood. Dr. La Roche wonders still more that Dr. Strobel, a contagionist of Charleston, should have credited this invention and tried to support it by some manuscripts left by Dr. Hosack, another contagionist.

These manuscripts were afterwards published, and in page 224 Hosack says, "during one of my visits in the last years of his life, I submitted to him my views of the qualified contagiousness of yellow fever; when he returned it to me he observed, 'Doctor, you and I can now shake hands, and unite nearly in the same doctrine.'" Rush may have said something very courteous, but those who know his firmness and honesty, will not believe that Hosack did not misapprehend him. No one can believe that he acknowledged to him what he had denied to all the world for many years, to the great injury of his fortune and friendships. His colleague, Professor Dorsey, who attended him closely in his last illness, says, "Eclectic Repertory," Vol. III., that he "died firmly impressed with the truth and importance of the doctrines he had advanced and taught;" and this same incontestable witness, on reading M. de St. Méry's slander, wrote to a medical journalist in England a flat denial thereof. Dr. Hosack lived twenty-two years after Rush's death, and he would have used De St. Méry's testimony in his controversies had he thought it true.

As to Rush's teaching a doctrine during his last eleven years,

and yet secretly not believing it, and all this heinous sin for his private emolument, a little knowledge with a moment's reflection aborts the monstrous conception. For every one knows that contagion and importation were the popular doctrines in Philadelphia. What then ought to have been his course had he sought popular favor? He had nothing to do but to write, lecture, and clamor in defence of what the people were most willing to hear. What then are we to infer from his doing the very contrary, from his writing, lecturing, and talking in defence of what they always heard with pain, hatred, and malice? But for a full discussion of this subject, we refer to Dr. La Roche's work on yellow fever, Vol. II., 254, 255, where De St. Méry is treated with merited contempt.

SAMUEL JACKSON,

Formerly of Northumberland.

JOHN WARREN.

1753—1815.

AMONG those men whom in the history of our country posterity will learn to regard as their most devoted benefactors, none will be placed in a more elevated position, or be considered as entitled to a more grateful remembrance, than the earlier teachers and practitioners of scientific medicine. Surrounded by almost insuperable obstacles, both to the attainment of instruction in those acquirements which in this noble pursuit can alone lead to extensive usefulness, yet having overcome them all, they certainly most richly merit the gratitude of succeeding generations, who have placed the cultivation of this science upon a firm and enduring foundation. When, in addition, we have the memory of the purest, most disinterested, and most active patriotism, sacrificing the dearest of human ties and interests for the general good, then, indeed, we have a combination which the pages of a nation's history are but rarely called upon to record. It is of such a man that the following pages are commemorative. Justice demands no more truthful exemplification of such a career, than is found in the public life and services of Dr. John Warren.

Dr. Warren was born in Roxbury, on the 27th of July, 1753. The house in which his father, Mr. Joseph Warren, resided, was standing until recently, when, becoming extremely dilapidated, its remains were removed by his son, Professor J. C. Warren, who caused a new stone edifice to be erected to mark the spot. Mr. Warren's chief interest and occupation consisted in cultivating the land, and particularly in raising fruit, and his en-

thusiasm in producing and bringing to maturity a certain variety of apple, to which he had given much attention, may, indeed, be said to have cost him his life. This was the apple now called the Warren russetting. While walking through his orchard one morning, he observed, near the top of one of his favorite trees, a very beautiful specimen of this fruit. The sun gilded its rosy side, and it had a very tempting appearance. Determined to obtain so valuable a sample, he climbed the tree, and just as he had plucked it, the branch upon which he stood gave way, he fell to the ground, and was instantly killed. The mother of Dr. Warren was one of those truly noble-minded women who always leave an impression ; an impression which is felt, however unacknowledged, from one generation to another, and which is extended in constantly widening circles, like the eddy formed by the stone upon the lake, with increasing radii, until the shore upon each side is touched by its gentle undulations.

That biography must indeed be imperfect, which omits all reference to the youth of the great and good, or to those early influences and teachings that planted the seed, which in its maturity yielded such beneficent fruit. The virtues of the mother of Washington will ever form a part of his country's history, and the simple instructions and example, the disinterested courage and devotion of Mrs. Warren, will be felt so long as the names of her sons and the memory of Bunker Hill shall hold a place among its annals.

Left at an early age a widow, with four young boys to educate, most faithfully did she perform the double duty which devolved upon her, and in her daily life they witnessed the exemplification of those virtues, which in after years they so signally imitated. A writer who knew her well, in describing her character, says : " But not only as a mother was she estimated, for she practised the virtue of benevolence in the fullest sense of the word. To her neighbors she was kind and hospitable ; to the poor her house was always open."*

* " Stories of General Warren, by a lady of Boston."

The name of Dr. Warren's eldest brother, Dr. Joseph Warren, will ever be remembered, as that of one of the earliest martyrs in the cause of his country's freedom. General Warren was also a physician, and previous to the Revolution enjoyed an extensive and lucrative practice in Boston. The eminence to which Dr. Joseph Warren had attained in the New England States, as a medical practitioner, may become shaded, and perhaps even overlooked, in the interest which his bright career and early death have awakened in the hearts of his countrymen. But this can never be without doing injustice to his memory, and to the medical profession, of which he was an earnest member, and in whose ranks he was proud to enrol himself. Dr. Joseph Warren was the medical instructor of his youngest brother, Dr. John Warren. He is, therefore, doubly entitled to consideration in a work on American Medical Biography, both as having himself been distinguished as a medical man, and as having kindled the flame of professional enthusiasm which burned so long and with such results in the heart of his ready pupil.

As, however, it does not enter into the plan of the work for which these pages are intended, to include a distinct memoir of him, a brief notice, in this connection, will not be considered as inappropriate.

Dr. Joseph Warren was born in Roxbury, June 11th, 1741. He graduated at Harvard University, Cambridge, Massachusetts, in 1759, and immediately commenced the study of medicine. Having completed the usual course, he established himself as a physician at Boston, where he soon acquired an extensive practice, and arrived at the highest eminence in the profession. Had he been desirous of wealth, or ambitious only of eminence in his profession, his opportunities were such as might have gratified his highest wishes. Dr. Perkins, a tory, used to say of him, "If Warren were not a whig, he might soon be independent and ride in his chariot." But the oppressive acts of the English government had excited an alarm, and Dr. Warren took too deep an interest in the affairs of his country, and felt too strongly the dangers that threat-

ened it, to suffer himself to be engrossed by private business, when his exertions might be of some use to the public. After the passing of the Stamp Act, he undertook a serious examination of the right of Parliament to tax the Colonies; and as time was not at his command during the day, his nights were spent in this investigation. When he had satisfied himself that no such right existed, he was indefatigable in his exertions to produce the same convictions in the minds of others. He devoted himself to the common cause with a zeal extremely prejudicial to his private interests. While he was engaged in disseminating the great truths he had learned, his pecuniary affairs were neglected and became greatly deranged. Young and ardent, with a fine person, engaging manners, and a kind and generous disposition, he enjoyed the affection and confidence of all classes; and was thus enabled to exert an influence extremely beneficial to the cause he had espoused. By his writings in the newspapers, his public speeches and orations, he labored to infuse his own ardor into the breast of his fellow-citizens. Probably no man did more to excite and sustain the spirit of opposition to British tyranny, for which Boston was so early distinguished.*

During his short but eventful life, Dr. Joseph Warren was appointed by his fellow-citizens to various high offices within their gift. He was elected first a delegate, and then president of the Provincial Congress; and chairman of the Committee of Public Safety. "By virtue of these places he united in his person the chief responsibility for the conduct of the whole civil and military affairs of the new commonwealth, and became a sort of popular dictator."† He twice delivered the annual oration commemorative of the Boston Massacre of the 5th of March, 1770; viz., in 1772 and 1775. The latter was delivered at the point of the bayonet. It is an historical fact that some of General Gage's officers had declared that no one should publicly refer to the event of which the day was commemorative, and escape with life.

* Vide Rees's Encyclopædia.

† Biography by Hon. Alexander H. Everett in Sparks's Biography.

It was on account of these threats of assassination that Dr. Warren, at his own request, was appointed orator on the occasion, as it is stated that there were not many equally willing to brave the indignation of the military. The pulpit in which he stood was filled with British officers, and the orator was obliged to make his entrance by a ladder at the pulpit window. The oration was as warm, earnest, powerful, and stirring an invective against English oppression and tyranny as any which had ever been pronounced; and the bloody scene in State Street, with the series of wrongs which had preceded, were vividly portrayed. While in the midst of one of the most exciting periods, an officer standing upon the steps leading to the desk, being unable longer to endure the stinging words, drew and cocked his pistol and pointed it at the head of the orator. Dr. Warren saw the movement, and without a moment's hesitation in his speech, unblenched and unmoved, took from his desk his white pocket-handkerchief and quietly dropped it upon the up-turned muzzle. The sensation produced among the populace below warned the officers of their danger and prevented the execution of their implied threat.

At the battle of Lexington, the first conflict of our Revolution, Dr. Warren took a prominent part. In Mr. Alexander H. Everett's account of the engagement, he says: "For the vigor and determination which marked the conduct of the people on this occasion, it is not too much to say that the country is mainly indebted to the vigilance, activity, and energy of Warren."

On the approach of the British he armed himself, and went out in company with General Heath to meet them. On this occasion he displayed his usual fearlessness, by exposing his person very freely to the fire of the enemy; and a bullet passed so near his head as to carry away one of the long, close, horizontal curls, which, agreeably to the fashion of the day, he wore above his ears.

Previous to receiving his appointment as Major-General, Dr. Warren had been requested to accept the office of Surgeon-General to the army. But this office suited less with the ardor

of his temperament, than to be an active participator in the hazards and triumphs, the adversities or successes, of the glorious struggle. We are told, however, that his aid and advice were sought in the medical department, and were of great service to them in their organization and arrangements.

Dr. Warren was prepared by a thorough course of military study and observation for the elevated rank to which he was appointed in the army. He did not live to see the grand object of his life achieved. He died on the field of battle, on the 17th of June, 1776. In the official account of the battle of Bunker Hill by the Massachusetts Congress, his death is thus noticed: "Among the dead was Major-General Joseph Warren, a man whose memory will be endeared to his country, and to the worthy in every part and age of the world, so long as virtue and valor shall be esteemed among mankind."

Such was the life and character of the elder brother and medical instructor of the subject of this memoir. Dr. John Warren was educated at Harvard University, in Cambridge, Massachusetts. He entered college at the age of fourteen, and was entirely dependent on his own exertions for maintenance while pursuing his education. Even at this early age, he exhibited a taste for the study of anatomy, and by his efforts an association of students was formed for the purpose of cultivating it. He took the degree of Bachelor of Arts in 1771; and having, under the tuition of his brother, completed his preparation for the practice of medicine, he settled in Salem, in 1773, being then only twenty years of age. He had previously made himself thoroughly acquainted with the Dutch language, with the intention of pursuing the practice of his profession at Surinam.

The disturbed state of his native land, however, and his unwillingness to leave home while trouble was impending, prevented the execution of this design. While pursuing his medical studies, he was initiated by his brother into the principles on which the patriots of that time grounded their opposition to the pretensions of the British government; and imbibed his ardor in supporting the rights of his country. He early

became a political writer, and engaged heart and soul in the sacred cause of freedom, and in animating his friends and his often desponding fellow-citizens to encounter with fortitude the difficulties of the contest. He endeavored to impress upon them his own sentiments: "that being engaged in a cause that was just, it was their duty to persevere, and to be discouraged neither by present danger nor by the certain prospect of death."

In Salem, Dr. Holyoke soon became one of his warmest friends. To all who are acquainted with the medical history of our country, the name of this distinguished physician is familiar. Universally respected and beloved, he was alike honored for his practical science, his extensive attainments and accurate judgment, and for those noble qualities of mind and heart which attached all who were personally acquainted with him, and left a memorial in their hearts which the lapse of years has had no influence in effacing.

Aided by so influential a patron, and winning his own way by his agreeable manners and evident ability, the practice of Dr. Warren rapidly extended, and soon became second only to that of his distinguished friend. In the mind of Dr. Warren, however, personal and individual considerations were of but minor importance when the welfare of his country was in jeopardy. It is evident that love for his native land was paramount to all other interests. He was present when the first blood was shed in that eventful conflict which severed the American Colonies from the mother country. News being received of the intended attack on the military stores at Concord, he immediately joined Colonel Pickering's regiment, as a volunteer, and marched to the defence of this most important post, and was present when the two hostile forces encountered at Lexington, where the first battle took place. Two of Dr. Warren's brothers were also present in this action, and each of them took an active part in the skirmish.

The reports of the conflict and the rumbling of the cannon of the ever to be remembered 17th of June, again called Dr. Warren from his professional duties. He armed himself, and

hastened on foot, guided by the flames of Charlestown, to join the army at Cambridge. His mind was overwhelmed with anxiety for his brother's safety. He well knew that that brother's enthusiasm in the cause would lead him into the thickest of the fight, and he felt his own heart burning with eagerness to engage in the glorious struggle. Various and contradictory reports reached him on the road. By some he was informed that General Warren was taken prisoner; by others, that he had been slain on the field of battle.

During this period of suspense, Dr. Warren suffered great distress. After some days the certainty of his brother's death was established, and the excitement caused by this event, added to his previous deep interest in the cause, determined him at once to relinquish his brilliant professional prospects, and to engage as a volunteer in the capacity of a private soldier.

The intense agitation and emotions of resentment which burned in his breast against the instigators of those outrages which had brought such evils upon his country, may be best gathered from some fragments of his private journal which have recently been discovered, extracts from which have been published. I cite a few sentences to show his feelings at this exciting period. "Some told me that my brother was undoubtedly alive and well, others that he was wounded, and others that he fell on the field. Thus perplexed almost to distraction, I went on inquiring with a solicitude, which was such a mixture of hope and fear as none but such as have felt can form any conception. In this manner I passed several days, every day's information decreasing the probability of his safety. Oh ye bloodthirsty wretches, who planned the dreadful scene which you are now forcing your bloodhounds to execute, did you but feel the pangs of heartfelt pungent grief for the cruel wounds you inflict upon the tenderest part of the public, as well as upon individuals, you would execrate those diabolical measures which, by your counsels, have been adopted, and which have precipitated us into all the horrors of a civil war! . . . Go home, and tell your bloodthirsty master your pitiful tale, and tell him, too, that the laurel which once decorated the English soldier,

has withered on his brow on the American shore. Tell him that British honor and fame have received a mortal stab from the brave conduct of Americans. Tell him that even your conquests have but served to inspire the sufferers with fresh courage, and more determined resolution, and let him know that since that accursed day, when first the hostile forces of Britain planted their foot on the American shore, your conduct has been such as has resulted in a continued series of disgraceful incidents, and in operations replete with ignorance and folly."

The deep grief of Mrs. Warren at the loss of her eldest son, and the anguish she experienced at the thought of another being equally exposed, at last prevailed upon Dr. Warren to alter his resolution. He decided to serve his country by performing the more useful and equally arduous duties of hospital surgeon. To this office he was appointed by General Washington, during the siege of Boston. Important and honorable as this siege was to America, the regular army of Great Britain being shut up by an undisciplined militia for nearly a year, it was not fertile in military events.

In March, 1776, however, there was a prospect of a bloody and desperate engagement. The Americans, by a masterly manœuvre of their General, had taken possession of Dorchester Heights, and the British commander had the alternative of driving them from their position, or of evacuating the city. He determined to make the attempt to storm the Heights, and at the same time to attack the American force at Roxbury. General Washington, ever on the alert, and not willing to act simply on the defensive, ordered a select body of four thousand men to cross Charles River in boats, and at the same moment to attack Boston. Dr. Warren was of this party, and sympathized with the hopes and animation which filled the breasts of this patriotic band. It is a matter of history that the English General did not carry out his intention, but finally abandoned the city.

Dr. Warren was one of the detachment ordered to take possession of Boston on its evacuation by the British troops. It

was on this occasion that he, with Dr. Daniel Scott, made the discovery of a most ignoble and fiendish trap which had been set for their destruction by the enemy, viz., the poisoning of a large quantity of medicines that had been left by the English in the workhouse. This building had been used by them as a hospital, and in it were found large stores of capital and important articles. Upon examining these, Dr. Warren found that large quantities of white and yellow arsenic had been mixed with them. By this timely discovery, undoubtedly, many lives were saved.

Dr. Warren in his private journal very accurately describes the appearance of the city as it was left by the British, and the redoubts and fortifications upon Beacon, Copp's, and Fort Hill, together with the cannon, ammunition, horses, wheat, hay, and other articles which were found in various parts of the city.

Although this sketch is intended chiefly as a biography of Dr. Warren as a medical man, yet we cannot forbear making one further extract from this journal, to show more fully by what influences he was surrounded on his entrance into professional life, leaving the reader to judge how far these stirring events, which aroused the deepest feelings of an acutely sensitive nature, may have assisted in moulding his character in after life.

His first visit to the spot where his brother was slain is thus mentioned: "This day I visited Charlestown, and a most melancholy heap of ruins it is; scarcely the vestiges of those beautiful buildings remain. The hill which was the theatre upon which the bloody tragedy of the 17th of June was acted, commands the most affecting view I ever saw. The walls of magnificent buildings tottering to the earth, below; above, a great number of rude hillocks, under which are deposited the remains in clusters of those deathless heroes who fell on the field of battle. The scene was inexpressibly solemn. When I considered myself as walking over the bones of many of my worthy fellow-countrymen, who jeopardized and sacrificed their lives in these high places; when I considered that perhaps, while I was musing on the objects around me, I might be standing over the remains of a dear brother, whose blood had stained these hallowed walks;

with what veneration did this inspire me! how many endearing scenes of fraternal friendships, now past and gone forever, presented themselves to my view! But it is enough; oh, may our arms be strengthened to fight the battles of our God!" Dr. Warren was attached to the main army under the immediate command of General Washington. In the disastrous battle of Long Island, his professional skill was called into full operation, and he continued in active service throughout the gloomy and disheartening winter of '76 and '77. He, however, never for one moment was discouraged. Notwithstanding that the fate of the army seemed almost inevitable, as he constantly saw it diminishing in numbers day by day; although he beheld the suffering of the troops from the want of provisions and clothing, and retreated with the remnant as they were pursued from spot to spot, in this, the most dark and trying period of our eventful contest, yet his faith in the integrity of the cause, and the firmness of his conviction that the result would be the happiness and liberty of his country, prevented him from ever yielding to the pressure of the circumstances by which he was surrounded, but enabled him to sustain and strengthen the sinking hearts of his fellow sufferers. The successes on that eventful Christmas Eve at Trenton, and on the brilliant morning of the ensuing 3d of January at Princeton, confirmed his prognostications. At the former place, he and the entire medical staff were very near being taken prisoners. This was in consequence of the celerity and secrecy of General Washington's movements. Following up his advantages with a rapidity and decision which constantly took the English by surprise, and which so strikingly displayed the talents of a great military commander, he marched during the night to the attack upon the British at Princeton. The breaking up of the encampment took place so quietly that the medical officers were not aware of the event, until in the morning they beheld upon the other side of a small stream the advance of the enemy upon them, while their own army was not anywhere visible. Mounting their horses, they with some difficulty discovered traces of

the route taken by the American forces, and arrived in time to succor the wounded at Princeton.

Soon after this, Dr. Warren was seized with a fever which nearly proved fatal. Brighter prospects began now to dawn upon our country, and having been with the army through the most dangerous and discouraging periods of the Revolution, he was removed to another department, and returned to Boston to superintend the establishment of a military hospital in that place. He there continued in public service until the peace. This situation was favorable to the advancement of the anatomical studies which he had commenced when in college, and which he had occasionally pursued to the present time.

His proficiency in this branch, together with the skill in surgery which he thus acquired, gained him a distinguished reputation, and soon raised him to the rank of the most eminent surgical practitioner in the New England States; a rank which he maintained for nearly forty years.

While with the army at Philadelphia, Dr. Warren had frequently met, at his General's table, Miss Abby Collins, the daughter of Governor Collins, of Newport, Rhode Island. This young lady was on a visit to the wife of General Mifflin, and formed one of the family party at headquarters, at General Washington's table. She was a favorite *protégé* of the great commander, and the writer has often heard, from her daughter, anecdotes of the amiable hospitality and genuine kindness of feeling which were exhibited by General Washington in his domestic relations. The sweetness of his smile, called forth by any act of courtesy to himself, has been particularly dwelt upon. This expression no artist has ever adequately portrayed; and, in truth, it was too spiritual and characteristic in its tone ever to admit of being transferred to the canvas. Before the encampment at this place was broken up, Dr. Warren became engaged to Miss Collins, and soon after his settlement in Boston he went to Newport to claim his bride.

During the early part of his married life, the expenses of a family were a source of anxiety. They exceeded his means, particularly as he was, at this time, under the necessity of

liquidating a debt incurred for his education. Pecuniary embarrassments, however, could no more damp his ardor than political adversity; and, triumphing over all difficulties, he led the advanced guard in the corps of medicine and surgery.

His anatomical acquirements excited the interest and inquiries of his friends, and he gave for their instruction a few private demonstrations. These were so well received that the Boston Medical Association invited him to deliver a regular course of lectures.

Dr. Warren's opportunities for attending lectures upon any subject connected with his profession had been very few. Those whom he was now called upon to instruct had some of them been educated in foreign medical schools, and had heard the first lecturers of the age; they held the medical practice of Boston and its vicinity. Dr. Warren and his immediate contemporaries in the profession, when pursuing their studies, had been prevented from quitting home by the dangers which menaced their country, and the importance of their services at home at that juncture. Before such an audience, it was somewhat of a severe ordeal to present himself as an instructor. An early biographer, however, states "that all deficiencies were supplied by talents and resolution;" and another writer says that he "gained much reputation from his accuracy in demonstrating and his facility in describing."

In 1780, he gave a course of dissections to his colleagues with success. To them, the opportunity was so novel and so desirable that they seized upon it with zeal, and none of them ever forgot the impression received from his lectures. These lectures were delivered in the Military Hospital, which was situated in a pasture, in the rear of the present Massachusetts General Hospital, at the corner of Milton and Spring Streets. It is well known that, at the time referred to, and in truth for many years later, there existed a strong popular prejudice against dissections. On this account, the lectures were conducted with great secrecy. In the following year, they were more public, and the students of Harvard University were permitted to attend. It was this season, and at the place above

referred to, that Dr. Warren performed the operation for the removal of an arm at the shoulder-joint, with complete success.

Already, by bequests previously made, there existed, at the University, foundations for professorships of anatomy and surgery. No person had as yet appeared whose talents and acquirements in these branches were such as to entitle him to fill these important chairs. President Willard perceived how much the interests of the University might be promoted by the talents of Dr. Warren. A correspondence was entered into, which terminated in the establishment of the first medical institution in New England. The courses were opened in 1783. Dr. Warren filled the chair of anatomy and surgery for more than thirty years. For twenty-six years, his lectures were delivered in Cambridge without any assistance.

The difficulties with which he successfully contended in the performance of these duties, arising from the circumstances of the times, from the public opinion in respect to dissections, and other causes, cannot now be thoroughly understood. Add to these the delays and uncertainties of a tedious ferry, which had daily to be crossed, with the occupation and embarrassments of an extensive medical and surgical practice, and we may indeed consider this undertaking, and its attendant labors, as almost Herculean.

At times, in the winter, the accumulation of ice would render the ferry impassable. To disappoint his class, or take a long drive through Roxbury and Brookline were the alternatives,—a circuit of at least twenty miles. The latter was universally his choice,—going and returning on the same morning by this circuitous route, after performing his dissections for demonstration to his students, and delivering a lecture sometimes three hours in length.

Soon after commencing these exhausting labors, Dr. Warren was attacked with a violent fever, from which he was not expected to recover, and more than once were his overtasked powers on the point of sinking under these accumulated duties. Becoming fully aware that such exertions were rapidly undermining his constitution, he twice unsuccessfully tendered his resignation of the professorship. His services as a physi-

cian were zealously rendered to the poor, as well as to those whose pecuniary circumstances enabled them to remunerate, so far as money can remunerate, the attentions of a faithful physician. With what fidelity these duties were performed, with what devoted attentions their various calls were answered, there are many in all classes of society yet living to attest, by their words, still breathing the warmest affection, and by their grateful remembrance.

In 1784, Dr. Warren, in concert with several other medical gentlemen, established a small-pox hospital at Point Shirley, near Boston, and in 1792, he inoculated more than fifteen hundred persons.

At the time of the yellow fever epidemic in Boston, in 1798, he interested himself deeply in the study of this disease, both in its symptoms and treatment during life, and in the morbid appearances presented after death. He examined the bodies of a large number who had died of this disease, and at the time, when the belief in its contagious nature was universal, he answered all calls, and showed his fearless devotion to the welfare of his patients, by inhaling their breath, in order to ascertain* whether the calomel administered had had its specific effect. His experience in this disease convinced him that it was non-contagious.

At this period, Dr. Warren again became embarrassed in his pecuniary circumstances. He was induced to become responsible for the debts of a medical gentleman, and a former student, who had made extensive purchases of lands in the State of Maine. The lands were held in security. The gentleman failed to redeem his notes, and the property, reverting to Dr. Warren, was the source of large loss, of great annoyance and vexation, and finally involved a large portion of his property.

In 1783, he took part in the formation of the Massachusetts Medical Society; and in 1804, after having been an active member, and most of the time an officer in that Society, he was appointed president, an office to which he was annually re-elected until his death. Between the Society and the Medical School there had unfortunately been some misunderstanding, and at times even severe collisions. From his prominent position in

both institutions, he was enabled to create harmony, and final co-operation in the furtherance of those great objects for which they had each been instituted.

In 1810, by the efforts of Dr. Warren and his colleagues, the medical branch of the University was located in Boston. This step has served greatly to increase its prosperity and usefulness.

A remarkable advance in the state of American medical science dates from this period. These changes were observed to have originated in Boston, and to have spread from thence throughout the country. A few years previous to this event, Dr. Warren had been elected President to the Massachusetts Humane and Agricultural Societies. He was also at this time Grand Master of the Massachusetts Lodge of Free Masons.

In an eloquent eulogy, glowing with words fresh and warm from one of the noblest hearts and most gifted intellects of the profession, we find the following mention of the amount of work performed by Dr. Warren during these years of incessant toil. We refer to an address on the subject of this memoir, delivered at the request of the citizens of Boston, by Dr. James Jackson, who, universally beloved and honored, still pursues the beneficent work to which his life has been devoted, and exhibits a noble example of the true physician, the brightest star in the medical galaxy of New England.

His words are as follows: "From the year 1777, when Dr. Warren took charge of the army hospitals in this place, he became engaged in private practice. How extensive this has been, almost from the first moment, scarcely need to be stated in an assembly of his townsmen. Probably no man in America has gone through so much business,—I will not say in the same number of years, but even with the longest life. Certainly, for thirty years, one would think he scarcely retained time enough at his own command for the common purposes of sleep and refreshment. Yet we find that during this period he always had time to do good in his fullest proportion, as to those concerns which are common to all men. The interests of humanity were always his, and from her call he

could never turn away his ear. We learn from the respectable fraternity of Masons, that he was among their greatest favorites; and, following his brother, he attained, at the age of thirty, to the highest distinctions which they could confer. In the Humane Society he was one of the earliest and most valuable members, and for many years was justly placed at their head. What, in short, is the institution, designed for the promotion of human happiness among us, in which he has not taken an active part? When a useful object was proposed, who has not felt assured that Dr. Warren might be counted among those who would give his efficient support?"

Dr. Warren's mental attributes were of a high order. He may truly be considered a man of genius, although this was tempered and rendered doubly useful to mankind by a most rare combination with clear, far-sighted judgment, keen common sense, and extensive general literary attainments. His reasoning faculties were acute and powerful. He was gifted with a vivid imagination, which in the practice of his profession was of great service, both in enabling him to arrive at a more true and sympathizing appreciation of the sufferings of his patients than could otherwise be attained, and also in varying and adapting his treatment to the peculiarities and exigencies of the occasion. With a thorough knowledge of his art, he possessed a peculiar tact for the accurate observation of disease, and in rapidly arriving at conclusions, which another would only prove to be sound after a prolonged investigation. This quickness of perception, and the extraordinary rapidity with which thoughts succeeded each other in his mind, bringing him almost instantaneously to a correct judgment, constantly excited the astonishment and admiration of those with whom he was brought in contact. The rapidity of his bodily movement was equally remarkable. To this physical quality, may in part be attributed the power which he acquired of performing an amount of work in a short time, and of accomplishing in a comparatively short life, what, under other circumstances, would have been utterly impossible. His intellectual activity and celerity of motion were manifested in all his habits of life. It was his

custom to drive through the streets, when visiting his patients, often with his mind concentrated upon some important case, and with a speed which frequently set the laws of gravity at defiance, and at his own imminent risk. It has been related by those who have accompanied him in his gig, that, considering the danger as always great, they have been in the habit of placing one foot upon the step, in readiness for a spring to the ground in case of accident. An incident may, with propriety, be here mentioned, at once exemplifying the universal respect with which his person was regarded by all classes of his fellow-citizens, and the qualities, mental and physical, above referred to. A military company being one day on parade through the streets of Boston, Dr. Warren was observed approaching them, driving with his customary speed, absorbed in thought, and evidently unconscious of their presence. At the word of their commander, the soldiers, in true military style, opened to the right and left, and it was not until Dr. Warren had passed several of the foremost ranks that he realized this token of respect, and cordially acknowledged it with his usual courtesy.

His experience of the toil and anxieties indissolubly connected with the medical profession, both in their effect on the practitioner himself and upon those connected with him in the family relation, and their intrenchment upon those hours of domestic enjoyment, which to him were peculiarly dear, led him to express a decided opinion adverse to any of his descendants entering upon the same path, or forming any connection by which they would be liable to suffer from this cause, as he and his had suffered. But the father cannot mark out his children's destiny. His eldest son, the late Prof. J. C. Warren, whose career of elevated usefulness and distinguished professional renown has only recently terminated, early exhibited a taste for the studies and pursuits in which his father was so deeply interested. When his collegiate education was finished, this inclination assumed a decided character. His father's opposition was equally decided, and for several months the young man remained at home in comparative idleness, prevented from following his natural bias by his desire to conform to the pater-

nal wishes, while at the same time he found it impossible to interest himself in any other pursuit. But it was of no avail; the decision of the father was forced to yield to the enthusiastic ardor of the son. And it was well that it was so. Another of his sons, Dr. E. Warren, of Newton, Massachusetts, likewise became a medical practitioner, and two of his daughters were united in marriage to members of the same profession; the eldest to John Gorham, M.D., late Professor of Chemistry in Harvard University, and another to John B. Brown, M.D., of Boston. As an orator, Dr. Warren was gifted with peculiar power. His contemporaries unite in attributing to his eloquence a charm and interest which fascinated and riveted the attention of his audience. Time passed unheeded in listening to his flowing speeches, and after three hours had thus elapsed, which length of time was not unusual, they heard the closing words with regret. One who knew the subject of this memoir intimately, and to whose address we have previously referred, thus speaks of this endowment: "Amidst the various incidents and characteristics of his life which crowd upon my mind, I have not yet noticed his rare eloquence as a lecturer, nor do I know how to do so in adequate terms. To those who have been accustomed to its charms I cannot appear to do it justice. His voice was most harmoniously sonorous, his utterance distinct and full, his language perspicuous and well chosen. But its more peculiar charms were derived from the animation of delivery, from the interest he displayed in the subject of his discourse, and from his solicitude that every auditor should be satisfied both by his demonstrations and explanations." In a private communication to the writer, the same distinguished authority says: "His voice was fine, sonorous, and mellow, and in the sick-room it was beautifully tender, expressing the kindness of his heart and the warmth of his sympathy." The first time this gentleman met Dr. Warren, was in the chamber of a young college friend, who was taken ill in Cambridge, far away from his home; and the warmth and tenderness of his manner at that time made an impression which, after the lapse of more than sixty years, is still fresh in his memory.

Another, in referring to these traits which so prominently marked his character, and which alone can account for that deep affection which was felt towards him by all who knew him, and which is cherished for his memory in the hearts of those who yet survive, thus writes: "Nor was his fame limited to a narrow circle of admirers; it was extended through our State and country; it was known, and honorably, in that from which we sprang. Much may not be said, but it is impossible to be wholly silent, on his wonderful assiduity in the practice, as well as diligence in the study of his profession. No call was unanswered; no hours or seasons were reserved. Wherever there was pain to be assuaged, or infirmity to be supported, or anguish to be relieved, there, at the first summons, was this ready minister of the healing art. The poor, who could give nothing but gratitude, the wretched, who scarce dared ask his attention, found in him a good Samaritan, not only binding up their wounds, but imparting, too, oil and wine for their comfort. To all his patients the manner of his attendance enhanced the value of his skill, and rendered him not only a celebrated but a beloved physician."

"Not diligence alone, in the pursuit and communication of knowledge, and the discharge of those duties to which he had peculiarly pledged himself, but ardor of soul in all that he thought or did, emphatically characterized him. Who so active in business as he? Who more fervent in spirit? What could have carried him through such a course of duty, especially with his slender habit of health, but an eagerness which nothing could repress, a zeal which nothing could abate, a resolution which nothing could impede? His liberality was not confined to professional services; he cheerfully gave pecuniary aid to those he found in want; and all enterprises of a public or charitable nature found in him a ready contributor, both of money and of time."

Ardent, energetic, enthusiastic, and generous in his temperament, Dr. Warren's mind and heart were in harmony with these qualities. Disinterested and unselfish almost to a fault, his whole soul was absorbed in fulfilling his duty towards those

who were entrusted to his care; leaving no possible means for their relief unessayed; elevating, ennobling, and extending the usefulness of the medical profession; and benefiting the community of which he formed a part. His nature was acutely sensitive, and his feelings keenly susceptible. He declined no responsibility which it seemed right he should assume. He exacted from himself the performance of duty to its utmost limit; and his shrinking from the fear of subsequent self-reproach caused him often to extend these limits far beyond the reality, and beyond his own powers of physical endurance. If an unusually important or doubtful case, or one which especially interested his feelings, was to be considered, his anxiety overcame all personal considerations, and the long hours of the night were passed in pacing his room, tasking his brain for some untried measure yet remaining to be employed, or by prolonged thought seeking to assure himself that no expedient which science or thoughtful consideration could suggest had been neglected. Keenly alive to the sufferings of others, the feebleness of his own constitution and his own liability to attacks of disease, to which he was for many years subject, were immediately overlooked when others called upon him for aid. It was his custom to ride much upon horseback, as being the most expeditious means of visiting his patients, and especially when summoned in the night. His own complaints were most frequently relieved by an emetic, combined with the sudorific effect which usually accompanies their administration. He could not, however, even while under the influence of this remedy, be prevailed upon to refuse to bestow upon others the required attention; and frequently, after having retired for the night under these circumstances, he would rise and, in the severest weather, jump upon his horse and hasten to the bedside of the sufferer. It was undoubtedly such exposures, united to other causes already referred to, that undermined his constitution and shortened his life. As an almost necessary accompaniment of this extreme sensibility, Dr. Warren was subject, at times, to great depression of spirits. The hopes and aspirations of a strong and firm religious conviction

had, however, taken deep root in his mind. Faith in the supreme goodness of a superintending Providence, and in a nobler state of existence, cheered him in his most desponding moments. To a firm conviction of the truth of the Christian revelation he had arrived, as the result of personal examination.

"He was a Christian from conviction as well as feeling. He had examined for himself the evidences of our religion, and was satisfied of their conclusiveness; and the fruits of his belief were shown in a life spent in doing good, and in diffusing religious sentiments where he had influence. Although he visited many patients on Sunday morning, he devoted the rest of the day to religious duties, to attending on public worship, to reading on religious subjects, and instructing his family in the great truths of Christian doctrine. The foundations of this practice were laid by the instructions of an excellent and pious mother, whom he zealously cherished while she lived and deeply mourned on her death."*

All biography is comparatively worthless which, in describing the public actions of a man, does not, at the same time, weave into the history a sketch, minute so far as possible, of the distinguishing traits in his character in private life, one from which the reader may be enabled to trace, in a clear, well-defined, and unique form, the entire man. No apology, therefore, is required for having entered into these minutiae. It is in such chiefly that the biography of one distinguished man differs from that of another in the same walk of life; otherwise there would be a tendency to wearisome sameness. It is a narrative of the mental and moral qualities which can alone respond to the interest in the private history of an individual which his public career has awakened. From the sketch which we have thus far endeavored to trace, the true characteristics of Dr. Warren, in his domestic relation, will be readily understood. The ever-flowing tenderness of affection with which he regarded those of his own household, and which awakened an enduring and peculiar strength of filial love and

* Thacher's Medical Biography.

reverence in return, need find no memorial here. It requires no more living remembrance than that which it has found in the hearts and lives of those to whom he was thus united, and affords ample proof, if proof were required, that the career of the man of science, of one even the most completely absorbed in the active duties of life, is not inconsistent with the cultivation of the higher and nobler qualities; that such a life does not, of necessity, exclude the growth of those finer sentiments of the heart upon which, more than upon all else, true happiness depends.

In his intercourse with his patients, the same susceptibility was conspicuous, and was the means of acquiring their affection. "He entered readily and warmly into their feelings. He affected no interest in their troubles that was not sincere. If they were in pain he knew what their sufferings were, and it would have been abhorrent to his nature to have treated them with indifference. In all the anxieties of those who were connected with the sufferers, by the relations of domestic life, he warmly sympathized, for no one had felt them more deeply than he. His virtues were heightened by an unaffected modesty, which the place he held in the estimation of his fellow-citizens never diminished. With the qualities we have described, he could not fail to possess that true politeness, which has its foundation in a benevolent heart."*

The esteem in which he was held often caused him to be called upon by those whose wish it was to advance some important political or social measure, and who were desirous that his influence should be exerted in its favor. The writer has been informed by contemporaries of Dr. Warren that this influence was considered as almost a guide to public opinion. The peculiarity of the connection which, in those days, existed between the beloved physician and the families under his charge, will account in part for the power he possessed, to control or move the public mind. His interest in political affairs continued unabated through life, and when thus called upon, if the measure was one which met with his approbation, and one

* Op. sup. cit.

which he believed would advance the welfare of his country, or of his adopted city, he entered into it with his whole heart, and endeavored to secure its success by every means in his power. It was his custom, on such occasions, to acquaint himself thoroughly with the subject in debate, and previous to the meeting to write an address, in which his own views, with the course of reasoning which had convinced him of their correctness were clearly stated. Dr. Warren's published writings are not numerous. It certainly is remarkable, under the circumstances in which he was placed, that he found any time for the cultivation of general literature. Those important branches of knowledge, the daily acquisition of which is so indispensable in the progress of every well-balanced mind, were, however, never neglected.

He delivered the oration on the first celebration of our National Independence, July 4th, 1788. This oration affords abundant proof of extensive historical reading, of familiarity with the political affairs of the day, and of a wise and thoughtful consideration of their influence on the present and future welfare of the country. Oration and addresses on various other occasions of public interest have been published, viz., one before the Massachusetts Humane Society; one on the Hon. Thomas Russel, President of that Society; an address to the Masonic Lodge of Massachusetts, &c. &c. He likewise contributed a number of valuable articles for the Communications of the Massachusetts Medical Society; others to the New England Journal of Medicine and Surgery, and the Memoirs of the American Academy of Arts and Sciences. The Boston Magazine, which was instituted in 1783, also contains in its pages articles from his pen, on some of the various miscellaneous subjects of general interest.

A dissertation read before the Massachusetts Medical Society, entitled "A View of the Mercurial Practice in Febrile Diseases," contains a minute analysis of the effects of this remedy, in the class of diseases in which it has been considered most efficacious. The results of an extensive practice, and of many years of careful observation, are here impartially narrated.

The influence exerted by the remedy, as modified in many instances by the peculiar type of the prevailing disease, is minutely investigated, together with the circumstances in which it may be regarded as beneficial or injurious.

In regard to various diseases in which calomel had previously been universally resorted to, Dr. Warren offers opinions in advance of the received authorities of the age, and in some instances strikingly coincident with those which prevail at the present time. Hydrocephalus, for example, is even yet considered by a large majority of English and American practitioners to be properly treated only by a resort to large and frequently repeated exhibitions of that remedy.

In 1813, however, Dr. Warren wrote: "Calomel has for a long time been thought to be almost the only medicine affording any prospect of success. Whether it has ever effected a cure in real hydrocephalus internus, may, perhaps without imputation of skepticism, be doubted." His pathological investigations were unwearied, and the recorded results of these researches have afforded assistance in the diagnosis of disease at a later period, and their effects may often be traced in the established and universally received opinions of the present day. The work alluded to is, perhaps, the most concise and extended examination into the influence which this powerful remedy has upon many of those diseases with which we have most frequently to deal, and is a *résumé* of the knowledge and experience of the period, tempered and biased, of course, by the prevailing ideas and theories upon the subject to which it relates.

Dr. Warren's chief, and perhaps only recreation, consisted in the indulgence, during the middle and latter periods of his life, of his taste for horticulture. His love for the country and for rural pursuits had always been strong, and had only been kept in abeyance by his more absorbing and sterner interests and duties. At no period could the gratification of this refined taste be considered as more than a passing and momentary relaxation. It was his custom in the afternoon of a long summer day to jump into his gig, and, accompanied by one of his family, drive with speed to his estate on Jamaica Plain, in Rox-

bury. There he would pass an hour more or less, as circumstances would permit, in laying out his land, planting, trimming, and grafting his fruit trees, and in noting their growth, and the development and progress of his various experiments and improvements. These hours afforded him the purest and most unmixed enjoyment, and they were those which his companions on such occasions recalled in after years as among the happiest in their lives. His keen delight in the beauties and wonderful provisions of nature, rendered him at these times peculiarly communicative and interesting in his conversation. His allotted time having expired, again he was in the city, and immersed in the anxieties and fatigues of professional business.

A contemporary describes Dr. Warren's personal appearance and hygienic habits in the following manner :—

—"The personal appearance of Dr. Warren was most prepossessing. He was of about middling stature and well formed; his deportment was agreeable; his manners, formed in a military school and polished by intercourse with the officers of the French army, were those of an accomplished gentleman. An elevated forehead, black eyes, aquiline nose, and hair turned up from his forehead, gave him an air of dignity which became a person of his profession and character. Temperance was as agreeable to his wishes as it was necessary to his health. He rose and breakfasted early, afterwards did business at home, either professional or promiscuous, for about two hours, rarely leaving home till nine in the morning in summer, and ten in winter. He dined at two, ate heartily, but drank no wine and usually nothing but water,—for wine and the stronger stimulant drinks were poisonous to him through life. The afternoon and part of the evening were passed, like the morning, in visiting patients, and the evening terminated in visiting, or in consultation of such works as were necessary to the labors of the time, or in performing the duties incident to his position in the many societies with which he had become connected by his active and beneficent disposition.

"Dr. Warren made his visits very short. He wasted no time

in conversation, but immediately applied his mind to the case, and succeeded in possessing himself of it in a few minutes, in such a manner as perfectly to satisfy the patient and his friends; so that, though they often complained that his visits were short, and wished that they could have more of his company, they were deeply attached to him. This is not, however, to be attributed solely to their confidence in his skill, but to the warm and affectionate manner which with him was constitutional. In surgery, his pre-eminence was unrivalled during the greater part of his career. The soundness of his judgment saved him from erroneous conclusions in a practice more within the cognizance of the public than that of medicine. Although compelled to trust to his own resources, and for the most part destitute of any aid from consultation in this division of his duties, his success was uniform, so far as the nature of the diseases he treated would allow. Hence he was resorted to from all parts of New England for surgical advice and operation. His manner of operating was perfectly cool, composed, and decided. Though sympathizing in the suffering he was called upon to inflict, he did not allow that sympathy to influence him, or to hurry one step of his operation, or to omit any detail which could contribute to its success. Before its conclusion, he always satisfied himself and those about him that everything had been done that ought to be done, and that no relic of disease had been suffered to escape his vigilance. At a very early period, and long before it was practised on the continent of Europe, he introduced the healing of wounds by the first intention; thus shortening prodigiously the cure and the sufferings connected with it. Among other difficulties he had to surmount was the want of an individual to whom he could resort for making, improving, and repairing surgical instruments. No such person existed in Boston during the principal part of his time, and he was compelled to find a substitute in some itinerant razor-grinder, or in the labors of his pupils or his own hands."*

Dr. Warren's collegiate education included a knowledge of

* Thacher's Medical Biography.

the Greek, Latin, and to some extent of the Hebrew languages. He afterwards studied also the Dutch. Still later in life, being desirous of becoming acquainted with the French medical and anatomical works, he acquired that language; and thus a new field of industry and improvement was opened to himself, and an opportunity of transplanting to American soil the results of the investigations and discoveries of the French literati.

Dr. Warren never possessed a robust constitution. Throughout the early and middle period of his life, he had been subject to frequent attacks of sick headache, which were accompanied by great depression of spirits. In his fifty-first year, he experienced complete relief from this affection. From the age of thirty, he also suffered from uneasiness and pain in his chest and side. In 1811, while demonstrating a brain which had been immersed in alcohol and muriatic acid, and which he held and handled for a long time, in a very cold state, he was suddenly seized with a paralytic affection of the right arm, from which he never completely recovered. From this time the affection of the chest increased in severity, and recurred with still greater frequency. The pain came on in paroxysms and generally in the night. He was often obliged to take considerable doses of opium for its relief, and at times even this remedy failed. He would then rise and bleed himself. This last resort generally mitigated his sufferings. During the last winter of his life these attacks became alarming. They were attended by a sensation as if of a cord drawn across the chest and consequent dread of suffocation, producing great agitation and distress. In February and March, 1815, he underwent great anxiety, exposure, and fatigue. His friend, Governor Brooks, had been dangerously ill, and Dr. Warren had been obliged to visit him once and sometimes twice a day at Medford, five miles from Boston. About the same time, one evening, on returning home, he received a letter informing him that his brother, at Foxboro', twenty-five miles distant, had dislocated his shoulder, and that the physician of the place had been unable to reduce it. Exhausted as he was in body and mind, and laboring under disease, Dr. Warren immediately ordered a

carriage, and started for his relief. On his arrival, he at once commenced operations, and made several unsuccessful attempts to reduce the dislocation. He finally deferred further efforts until morning. He obtained no rest, but passed the night in walking the room. Before morning he again roused the family, and made renewed, and this time successful, efforts to restore the joint. Sinking from exhaustion, he got into his sleigh and returned home, and resumed his usual routine of visits. On the night of the 22d of March, he had a paroxysm of dyspnœa, with fever. On the 25th, he again visited some patients, and in the afternoon attended to business at home. In the night, he had an alarming attack of his complaint. From this time, the disease increased in severity, accompanied by fixed pain in the right side, and laborious respiration, with occasional cough. The remedies made use of alleviated the most distressing and urgent symptoms, but debility and general derangement of the functions of all the organs supervened. The pulsations of the heart became irregular and intermittent; the circulation in the left arm became peculiarly disordered, and the functions of the brain impaired. On the evening of April 8d, a distressing paroxysm of pain and dyspnœa occurred, so severe that he requested an opening might be made in the side, probably under the impression that pus or water might be discharged. The pain was relieved by the application of hot tincture of cantharides and a moderate dose of opium. At seven in the morning of the fourth, he inquired the hour; then remained quiet; in a few moments he began to breathe more slowly, and almost imperceptibly expired without a struggle or a groan.

A dissection of the body revealed extensive disease of the aorta. The following is the account given of the pathological appearances.

"The affection of the aorta was of that sort which terminates in ossification. The extent of the morbid change was from the orifice of the vessel, including the valves to as far down the thorax as the sixth dorsal vertebra, and probably much further. On the right side of the thorax, the lungs adhered in all the upper part. This adhesion was evidently of

long standing. The lower part of the lung on both sides, but mostly on the right side, was greatly inflamed. The pleura on this part was high-colored and was covered by a recent effusion of coagulable lymph. The lungs were heavy and very firm, not crepitating. When the inflamed parts were divided, very few air-bubbles issued; but from some portions there was discharged much thin purulent fluid. In nearly one-third of the whole lungs the air-cells were compressed by the effusion of coagulable lymph into the cellular membrane."

The grief felt at the death of Dr. John Warren was great and widely extended. His fellow-citizens united to do honor to his memory. His remains were deposited in a tomb erected for the purpose by his family, in the cemetery under St. Paul's Church in Boston, in the same sepulchre where also were laid the relics of his brother, who was killed on Bunker Hill. A eulogy was pronounced at the interment by his friend and former colleague, Professor James Jackson. A funeral sermon was preached at the church where the deceased had attended public worship, and the Hon. Josiah Bartlett delivered a funeral oration at the request of the Grand Lodge of Massachusetts.

BUCKMINSTER BROWN.

CASPAR WISTAR.

1761—1818.

IN every age, and among all nations by which medical science has been cultivated, the names of those who have devoted themselves to the advancement of that science, or to the application of its principles to practical purposes, have been enrolled among the highest ornaments of that scroll whose ample face bears the record of the grateful homage paid to worth. Both as a cultivator of the science and a practitioner of the art of medicine, Caspar Wistar deserves a place in the highest rank of American worthies.

If the statesman and the warrior are more often lauded amid the bustle and agitation of civil strife, their glory is found floating on the surface of the broad and rushing stream. In that deeper and more important current of the great sum of human interests, the tranquil course of domestic life, where the affections dwell, and the heart finds its repose, the minister of healing occupies the most sacred place; and, in proportion to the perfection in which the various elements of the moral and intellectual power are combined in his character, is the devotion to himself with which he inspires the hearts of those to whom he is the minister of God to dispense relief in suffering, in the cure of disease, or in the sympathy with affliction and bereavement. There has been no period in the annals of Pennsylvania in which the inhabitants have not been blessed by the presence of medical men whose names were household words during their respective lives, and whose memory has been

transmitted from generation to generation by grateful recipients of their kindness and appreciators of their skill. The names of Owen, Zachary, Cadwalader, the Bonds, Shippen, Kearsley, Kuhn, Morgan, Jones, Redman and Rush, predecessors of Wistar, may well challenge still for their descendants the homage which succeeding generations are always ready to pay to the merit of the past; and the knowledge of their honor, doubtless, had its due weight in determining his career. It is a natural influence, felt and recognized by the ingenuous mind of honorable youth, filled with noble aspirations; and leads to the dedication of the highest talent and purest moral worth to the noble calling of the physician. To commemorate, therefore, those who, like Wistar, have adorned the profession of medicine, is not only due to the memory of such as have earned the meed of praise, but is, at the same time, a debt which posterity may claim, as every such memorial affords a strong incentive to others to emulate their character, that they may participate in the honor of those thus revered: and as the lapse of time obliterates the record, it becomes a work of affectionate interest to cut afresh the traces of the worn inscriptions, and thus to renew their influence on the ever-flowing generations of man.

Caspar Wistar was born in Philadelphia, on the 18th of September, 1761. It was then, without a rival, the acknowledged principal city of the British Colonies in North America; and the period was one which gave more than usual eminence to all whose lot it was to become actors in the great events which were then just beginning to assume the position which has given them unrivalled importance, and made their influence to be felt throughout the civilized world.

It was not only by their resistance to unrepresented taxation that the colonists were at this time asserting their rights as British freemen, and their claim to that interest in the management of the government which could only be exercised by the recognition of their independence of the mother country. An indication of this growth of nationality, not only very significant in itself, but especially germane to our present sub-

ject, is afforded by the fact that, just at this time, only one year subsequent to the birth of Wistar, a school of medicine was commenced in Philadelphia. It was thus a conjuncture which demanded for our science men homeborn and bred upon the soil, who should be able to seize the lamp, as it should be ready to fall from the hands of the first runners in the race, and carry it, with steady and increasing power of illumination, to be delivered to another generation. To this, Caspar Wistar was admirably adapted.

He was the son of parents of great respectability, and in affluent circumstances. His paternal ancestry was German. His grandfather, who bore the same name, had emigrated from Hillsbach, near Heidelberg, in the year 1717, and had married at Germantown, Pennsylvania, Catharine Jansen, whose parents were also German. It is interesting to trace the germs of the same character which was afterwards displayed by the grandson, in this his first progenitor in the New World. Having a brother younger than himself and several sisters, he relinquished his patrimony to his sisters, abandoned the Fatherland, and arrived in Philadelphia with a pistareen in his pocket and a handsomely-mounted double-barrelled revolving gun on his shoulder, "to carve out for himself a fortune in the New World." This fowling-piece is still in the possession of Dr. C. Wistar Pennock, one of his descendants. The legends of the family prove how zealously and honorably he applied himself to the accomplishment of this object, and his efforts certainly were crowned with success. Residing in Philadelphia, he established in New Jersey, near Salem, what is believed to have been the first glass factory in the Colonies; an enterprise in which his son, the father of Dr. Wistar, was, in due time, associated with him. The peculiar characteristics which displayed themselves in the person of Dr. Wistar in the wider sphere which he adorned, were equally strongly marked in his father and grandfather. These were strict integrity, great industry, quick conscientiousness, and enlarged benevolence.

His maternal ancestry was English, Bartholomew Wyatt,

the father of his mother, having accompanied the earliest settlers of West Jersey under the auspices of William Penn. These worthy people on both sides were "Friends," commonly called "Quakers," a fact which alone is sufficient to indicate their possession of an earnest and religious character; since at that period the views which are peculiar to this sect were held, with perhaps a few exceptions, only by such as were willing to sacrifice all personal and temporal advantages for conscience sake. Under the influence of such parents, and with such ancestral traditions, Caspar Wistar was trained to the practice of every virtue and the avoidance of every vice.

Among the earliest efforts for the permanent benefit of the colony they had established, William Penn and his "Friends" appropriated their means freely to the endowment of schools of learning, in which their children and descendants should receive the advantages of a liberal education under the purest and wisest moral control. It was in a school thus endowed, and in a building which exhibited the generous and enlarged views of those by whom it was erected, and which stood until the last year or two on Fourth Street below Chestnut, in what was in the day in which it was built, the healthy western suburb of the growing city, young Wistar received the best classical education the New World could afford. The devoted and constant friend of his maturer years, and the loving eulogist of his memory, Chief Justice Tilghman, says of this period: "I have been able to discover nothing very uncommon in his juvenile character. In quickness he was surpassed by several of his companions; but what he undertook he never failed to accomplish by perseverance." He certainly at this time and in this school laid the foundation of an education which enabled him, when soon after he repaired to the schools of Europe for further advantage, to assume at once a position, which proves that he was at least the equal of his compeers, and through life he associated on a footing of ease with the most learned and scientific men of his day, as well in Europe as in this country. He was able to converse fluently and correctly in Latin, had the usual command

of French, and an intimate acquaintance with the German language.

The political excitement which marked the period at which he was born, steadily increased in the several Colonies, and it was while he was a boy, pursuing his studies in the Academy in Fourth Street, that the Congress of Delegates met to consider their grievances and devise means for their redress, in Carpenters' Hall, which stood immediately adjacent to the school.

What were then his sympathies and emotions we are not told. We may, however, justly infer from the views on such questions which he held strongly in mature life, that the ardor of youthful feelings would lead him to adopt that side which asserted the liberties of the people, and their right to resist, passively at least, all encroachment on their privileges; and with an intelligent appreciation of the blessings of that freedom which had been the heritage of their ancestors from the earliest period of history, to transmit to their posterity a noble patrimony which can only be maintained in its integrity by the resistance of each generation to those invasions which are ever being attempted on the one or the other side.

It was not long till the determined resistance to encroachment culminated in open strife. The importance of Philadelphia, then the largest city on the continent and the seat of the American Government, caused its vicinity to be soon the seat of war; and the battle of Germantown presented to the peace-loving inhabitants the sad opportunity to witness "the wicked wastrie of life in war." While the religious principles of the Wistar family prevented most of its members from any active participation in the bloodshed of battle, there were others nearly allied to them who were foremost in the conflict; and every feeling and principle by which their lives were governed, called those who were non-combatants to minister to the relief of the wounded. It is asserted by Chief Justice Tilghman, whose authority is beyond doubt, that Caspar Wistar, then but sixteen years old, was active in assisting those who were prompt in rendering the services required by the wounded. "His be-

nevolent heart was affected by the sufferings of the wounded soldiers; and so deeply was he struck with the happy effects of the medical art that he determined to devote his life to a profession formed to alleviate the miseries of mankind."

Such was the fountain-head of the stream which, as it ran onward, ever spread wider and grew stronger, dispensing blessings as it flowed.

When he had completed his scholastic education, young Wistar devoted himself to the study of medical science under the direction of Dr. John Redman, one of the most eminent medical practitioners of Philadelphia, and President of the College of Physicians, instituted at that early period for the promotion of the culture of medical science, and the regulation of those ethical relations which should subsist among those who pursue so noble a calling.

The Medical School of Philadelphia, then still in its infancy, was the first established in the British Colonies. Commenced under the auspices of men of highly cultivated minds and lofty aspirations, it had been founded solely with a view to the benefit of those Colonies. While pursuing their own studies in the schools of Europe, two of the sons of Philadelphia, Dr. W. Shippen, Jr., and John Morgan, conferred together on the need of such an institution, and determined to accomplish the great undertaking of providing one for those who were forbidden to seek foreign instruction by the *res angustæ domi*, but who yet were endowed with ability to apply to the public benefit such medical knowledge as should be placed within their reach. Dr. Shippen reaching home before Dr. Morgan, commenced by giving private lectures on anatomy only. In April, 1765, Dr. John Morgan presented to the Trustees of the College of Philadelphia, a letter from the Hon. John Penn, Proprietor of the Province, giving his approbation to the effort; and being appointed by the Trustees Professor of the Practice of Medicine, delivered and published an address on the subject of medical schools under their auspices. In September of the same year, Dr. Shippen was, by the same board, appointed Professor of Surgery and Anatomy. These two gentlemen, in conjunction

with Dr. Shippen, Sr., the two Drs. Bond, Dr. Cadwalader, Dr. Redman, and the Rev. Dr. Smith, the learned and judicious Provost of the College, prepared a plan for conducting medical education and conferring degrees, which was adopted, and the Faculty enlarged by the addition of Dr. Adam Kuhn, as Professor of *Materia Medica* and Botany, and in the following year of Dr. Benjamin Rush, of Chemistry.

The starting-point of the school was eminent; its tone was dignified; its ambition lofty. It aimed at the establishment of a system of instruction, which should present to the commonwealth men duly prepared to deserve the confidence they should seek, when they asked that the lives and health of the community should be intrusted to their care. The first commencement was held June 21, 1768, after a public examination of the candidates for the honors of the College. This fact is thus noticed in the minutes of that venerable institution. "This day, which may be considered the birthday of medical honors in America, the Trustees being met at 9½ o'clock in the forenoon, and the several professors and medical candidates in their proper habits, proceeded from the apparatus room to the public hall, where a polite assembly of their fellow-citizens was convened to honor the solemnity." A Latin oration was delivered by Mr. Lawrence, '*De honoribus qui omni ævo in veris medicinæ cultoribus collati fuerunt.*' A disputation was held between two of the candidates '*On the seat of Vision,*' and another between other two on the question, '*Num detur fluidum nervosum.*' Ten young gentlemen received the degree of Bachelor of Medicine.

Such was the noble beginning of the Medical School of Philadelphia. The College with which it was connected was, however, doomed to participate with all other humane institutions in the ruin caused by war. During the heat of the civil strife in the year 1779, an unfounded jealousy led to the confiscation of its estates, and the transfer of its property and position to a new organization incorporated under the title of the University of Pennsylvania. Possessed of the funds of the old College, and favored by the patronage of the dominant party, for a time

the new organization was paramount; and it was in this school that Caspar Wistar attended the lectures, and from it he received his degree of Bachelor of Medicine in the year 1782, just before the war with Great Britain was brought to a close by the acknowledgment of the independence of the American Colonies. The examination of the candidates for degrees was then conducted publicly, in presence of the Trustees and any citizens who might be disposed to witness it. Conflicting theories met with the support of rival teachers among the faculty, and Judge Tilghman says, doubtless on authority beyond question, "Each Professor examined with an eye to his own system. Of this Wistar was aware, and had the address to answer each to his satisfaction in his own way, with such uncommon promptness and precision as excited the surprise and commanded the admiration of all who heard him." Not content with the amount of knowledge thus acquired, nor with the honor thus achieved, and panting with an honorable and laudable desire to render himself thoroughly qualified for the performance of the high and responsible duties of the profession to which he had dedicated himself with entire devotion of all his faculties, the youthful graduate repaired to Edinburgh, at that time the centre from which the light of medical science was diffused over the entire British Empire.

As the students of the preceding generation had repaired from Philadelphia as well as from London, to Leyden to learn from Boerhaave and Albinus, so, at this time, they flocked to Scotland for the instruction of Cullen and the Monroes. On the way to Edinburgh young Wistar spent a year in the vicinity of London; and though, by the death of his father, he had been left to the unchecked control of his own pursuits, and had become possessed of an ample estate, he not only resisted the temptations to vicious indulgence by which so many are betrayed under such circumstances, but gave himself entirely to the diligent prosecution of the purpose for which he had crossed the Atlantic; thus early affording evidence of the possession of those principles which in after life enabled him to reach the eminence to which he attained. From London he repaired to Edinburgh,

and the assiduity with which he there devoted himself to his studies is amply demonstrated not only by the ripe fruits of his after life, but by the friendships he formed and the honors conferred upon him. Thus, for two successive years he was elected by his fellow-students one of the Presidents of the Royal Medical Society of Edinburgh, and also President of a "Society for the further investigation of Natural History." We may, without hesitation, adopt and reiterate the expressions of Chief Justice Tilghman, who, in recounting these evidences of the esteem which Wistar had acquired, remarks: "These honors conferred by a great, a learned, and a proud nation, on a youth, a stranger, and one whose country had but just risen into existence, are the surest testimonies of uncommon merit. We contemplate them not only with pleasure, but with pride. Their lustre is reflected from the man to the country which gave him birth." Nor must we forget, while estimating their value, that it was at a time when the fratricidal struggle which had given independence to our country was but recently terminated, and the heartburnings and jealousies of civil war had not yet died away. The course of life pursued by Dr. Wistar was singularly consistent. Chosen calmly and deliberately, though at an early period, it was steadily pursued to the end. Thus, diligent as he was in the study of those branches of knowledge which are more strictly professional, we find him, even while preparing for the examination for his Doctorate, turning his attention also to those collateral branches the cultivation of which adds so much to the resources of the intelligent physician, and in which he ever after manifested an increasing interest. It was not the mere caprice of the youthful mind, wandering lawlessly around the fields of observation, and returning with the empty recompense of dissipated powers; his was the careful, accurate investigation which seized and made profitable all knowledge which came within his reach.

Dr. David Hosack, in the eulogy pronounced by him before the medical classes attending upon his lectures in the city of New York ere the cold clay of Wistar had been consigned to its repose in the grave, thus records his testimony to the character he had won for himself while pursuing his studies at Edinburgh:

"He was distinguished for the same assiduity, correct moral deportment, and retiring, modest demeanor, that characterized him in every period of his life, and which, young gentlemen, permit me to add, you will ever find to be the sure and never-failing passport to distinction and usefulness. Such, too, was the impression made at that early period of his life upon his friends in the University, that his name was ever afterwards mentioned in terms of the warmest regard and respect. The impression which was thus made on my mind by the affectionate language in which he was spoken of by the late celebrated divine Dr. Erskine, the present eminent physician of that city Dr. Charles Stuart, and by the elder Professor Duncan, in all whose families he had been domesticated, can never be erased." To those thus enumerated, he added on the list of friends who ever watched his career with the interest which had been begotten by his character as a student, the celebrated Cullen himself, Sir James McIntosh, Mr. Emmet, and Professor Jeffrey, men whose friendship was not lightly bestowed, and never without reflecting honor on the merit of the recipient. After three years thus honorably and profitably spent, he took his degree of Doctor of Physic in 1786. Nothing could more perfectly exhibit the character of the mind of Dr. Wistar than the subject selected for his inaugural thesis, "*De Animo Demisso*." Dedicated to Cullen the great luminary of the medical world, and Franklin the philosopher of both the Old and the New, it is devoted to the investigation of the nature, causes, and treatment of one of the most distressing maladies to which our nature is subject. In Latin which does ample credit to his knowledge of that language, he discusses the relations between mind and matter, deducing his illustrations from the stores of medical literature, classic authors, and modern poets and philosophers, with a judicious liberality proving his acquaintance with them all, yet falling short of pedantic display, as well as of the mere quotation to furnish matter, so frequent in such productions; and he closes the essay with a tribute of grateful affection to his preceptors, Dr. Redman of Philadelphia, Dr. Jones of New York, and his friend, Dr. Charles Stuart of Edinburgh. In the

family of the latter gentleman he had been domesticated during the two years of his residence; and he addresses him as "*Eruditus meus jucundissimusque amicus*," and tenders his thanks, "*propter magna quæ ex consuetudine colloquiisque ejus percipimus commoda quamdiu apud eum habitavimus, quorum maxima cum voluptate, gratissimoque animo ad extremam usque ætatem fovebimus memoriam.*" This feeling he ever retained, cherishing fondly the recollection of the Christian faith as well as the domestic virtues of his friend.

In the year 1787, he reached his native city. The earnest student was the germ of the anxious, diligent, and faithful practitioner. The social position of his family and connections, with the comparatively limited population of the city of Philadelphia, placed him at once in a position which forbade mediocrity. His fellow-citizens manifested their respect for him in every proper mode, and ample was the return he made in the honor which, gathering around his own brow, was transferred to the city of his birth and the home of his affections. He was immediately appointed one of the physicians to the Philadelphia Dispensary, then recently established; and one of his preceptors, Dr. Jones, took every opportunity to promote his advancement, by manifesting his own confidence in his ability. It is related of him that having requested the young surgeon to assist him in a critical operation, when the patient was prepared, he handed the scalpel to Dr. Wistar, pleading the failure of his own vision as an apology for transferring the responsibility to him. The College of Physicians, which was then a very exclusive body, having few members and they the oldest and most distinguished medical men of the city, elected him one of its Fellows; while the American Philosophical Society, under the auspices of Franklin and Rittenhouse and Jefferson, called him to a participation in their labors for the investigation of knowledge, to which he devoted himself with an alacrity the offspring of earnest interest. On both he conferred by his subsequent career, honor more than a recompense for that thus early bestowed. The College of Philadelphia, to which the returning sense of justice

on the part of the government of the new State of Pennsylvania had restored its charter and endowments, placed him immediately among the trustees to whom was committed the duty of resuscitating that venerable institution, and a few months afterwards appointed him Professor of Chemistry and the Institutes of Medicine.

He devoted himself, with untiring energy, to the work of accomplishing a junction of the two institutions, convinced that more injury would result from the jealousy of rivalry in so narrow a sphere, than good from any honorable competition. It was chiefly through his instrumentality that this happy result was accomplished in the year 1791. At that period, the chair of anatomy was held by the one incumbent teaching the classes of both schools. The attendants on his lectures numbered one hundred and four, of whom fifty-five were attendants also on the lectures of the other professors of the University of Pennsylvania, while the larger number were matriculates of the College.

The new institution thus formed took the name of the University of Pennsylvania, and the Medical School that, by which it has become so widely known, of The Medical Department of the University of Pennsylvania. The high reputation of Dr. William Shippen, Jr., as a teacher of anatomy, of whom it was said by competent judges he had no superior, had caused him to hold that chair in both schools, and he was now placed in the same position in the new arrangement, while Dr. Wistar was appointed Adjunct Professor of Anatomy and Midwifery.

We thus find Dr. Wistar, in his thirtieth year, fairly started on that course in which he achieved for himself a distinction than which no greater has been attained by any competitor. He did not propose to himself to seek for fame. The honorable ambition to win the esteem and to acquire the confidence of his fellow-men was no stranger to his bosom, which responded promptly and warmly to such appeals. This was the goal at which he aimed; and, in the faithful discharge of duty to which this desire stimulated him, he acquired a reputation

which "*ære perennius*," like the monument of the bard, would entitle him to say, "*Non omnis moriar*." As we now look back not only on the course he himself ran, but on that of his coevals and successors, we find him still at least *primus inter pares*, and it would scarcely be injustice to any to challenge for him an unequalled reputation, even in this community, in which the medical profession has attained a degree of honor much higher than it enjoys even where it is most esteemed. Made illustrious during successive generations by the devotion to its arduous labors of those who, like Wistar, were impelled only by the desire to confer blessings, the profession of medicine has ever, in Philadelphia, been regarded with no stinted honor, and it is to Wistar and such as he, who, regardless of gain and prodigal of personal exertion, devoted their talents, and time, and fortune to the public, that we, who now bear the heat and labor of the day, owe the estimation we here enjoy.

The medical department of the University of Pennsylvania thus organized from the junction of the two schools, soon assumed in the Western continent the position of the great centre to which all who sought instruction in the art of healing flocked, from every part in which the English language was spoken; and, though the eloquence of Rush was a strong attraction, the sound wisdom of Wistar was not less celebrated. He was an able, instructive, and attractive teacher. Dr. Hosack says: "he at once evinced those great qualifications by which he was afterwards distinguished. The same fluency of utterance, the unaffected ease and simplicity of manner, the perspicuity of expression, the animation and earnestness arising from the conviction of the truths he was delivering, as well as from the desire to impress them upon the minds of the pupils, and the readiness with which he summoned and applied the numerous and varied resources of his mind, which many of you now in my hearing have had an opportunity of witnessing, Dr. Wistar displayed in a most remarkable manner, in the first lectures he delivered. Such were his fascinating powers of description, that even upon those subjects that are usually considered as an

uninviting part of a course of Anatomical lectures, the attention of his hearers was ever awakened and unremitting. Even in the demonstration of a muscle or a bone, his views were those of the philosopher as well as the anatomist."

The manner of Dr. Wistar in the anatomical theatre, surrounded by his pupils, was such as at once to command not only their confidence in his powers as a teacher, but their love and veneration for him as a man. Courteous and gentle yet dignified, he never stooped to seek the passing favor of the moment by pandering to a vicious taste, or indulgence in jesting or levity. His whole demeanor was that of one who felt himself the accredited minister of a holy service. With a countenance which changed with every passing shade of thought and feeling, and a heart which responded to the gentlest influences which touched it, none ventured on familiarity; yet the only awe he inspired, was that with which a kind and loving parent attracts to himself, rather than repels the children of his affection.

His intercourse with the students who frequented his lectures, was marked by one peculiarity, which was indicative of that greatness of mind which depends on entire truthfulness of character. So soon as the lecture closed, he allowed them to throng the area in which he stood; and he never closed the door to his private apartment, to which they were freely admitted; and he would prolong the lecture by conversation, during the time he was preparing to retire, and often remained talking to them and answering their numerous questions, not only without reluctance, but with a cheerful and happy tone of voice and expression of face, which, while it gratified the youthful aspirants to his favor, convinced them that he considered their interests paramount to his own convenience. He thus more than compensated his class for the few minutes by which he often trespassed upon their patience, through a want of absolute punctuality to his hours, which with him was almost unavoidable. Universally known and respected, his daily course through the streets was interrupted by persons of every grade in life, who were permitted to stop him by the way to consult

him about their ailments, or to testify their gratitude for the benefits received from his skill. His courtesy to all was unbounded; the poorest equally with the richest were received with kindness, and their cases treated with respectful consideration. His walks were almost an ovation, and childhood as well as manhood rejoiced at the beaming look and pleasant nod, which gave evidence of his recognition of each token of respect.

It was the habit of Dr. Wistar to invite the students in small numbers to his house, repeatedly during their attendance on his lectures. On these occasions his urbane manner and happy faculty of engaging them in conversation relieved the frigid formality which usually settles on such assemblages. The students of that day were generally from the rural districts, having enjoyed but few opportunities for social intercourse or familiarity with the usages of city life. Great embarrassment was therefore naturally a serious alloy to the enjoyment of such associations. No sooner would Dr. Wistar enter the room, around the wall of which some twenty or thirty young men but little acquainted with each other were arranged in awful expectancy, and take his seat in their midst, than he would address first to one and then another, some question as to the local peculiarities of the section of country from which they came, so worded as to prove the possession on his part already of some knowledge of themselves personally, and the subject about which he made inquiry; and thus would he draw them into conversation and give freedom to their powers, pent up not so much by ignorance, as by timidity. It was not in the company of students of medicine only, that he thus sought to place those around him at ease by drawing them into conversation on those subjects with which they were familiar, while adding at the same time to his own stock of knowledge. This delicacy of perception, and consideration for the feelings of others, marked his general intercourse with his patients and society; and gave an especial charm to the literary and scientific soirées which he gathered weekly at his house, when he collected there not only the best-informed and most intellectual citizens, but also all strangers

who were supposed capable of giving or receiving pleasure at such meetings. It is asserted by the Abbé Correa da Serra, that these parties at Dr. Wistar's house were the first which were held in this country on the plan of the European conversations. Nor was his hospitality confined to those meetings only, which were the origin of the Wistar parties, so called, of the present day. Under the auspices of Dr. Wistar, these scientific and literary parties were strictly such; the refreshments being limited to the simple tea and coffee, and similar light articles, which were handed to the company, instead of the luxurious suppers which now form so prominent a feature of these entertainments. On suitable occasions, however, his table was spread as a generous board; and few strangers of any mark visited our city without partaking of the pleasures which clustered there. Warm and quick in his feelings, generosity was an especial characteristic of his heart, and by its promptings influenced his mind. This led him to pay but little attention to the pecuniary obligations of his patients, to whom he gladly rendered gratuitous services even when the recipient had no special claim on his consideration; while to those, who, with straitened circumstances were struggling to sustain a respectable position, his sympathies were ever open.

As a practitioner of the healing art Dr. Wistar occupied a position no less eminent than that we have seen he possessed as a cultivator and teacher of the science. Endowed by nature with a determined will rather than a quick perception, those who knew him best speak of him as less rapid in his mental action than many who have yet not attained to the same eminence. As a corrective he combined with this an earnestness of purpose, and highly wrought moral sensibility, and an exalted benevolence, which stimulated him to action and sustained him in effort. The examination of each individual case was, therefore, made with the most minute scrutiny of all its features, and a patient attention to the complaints of the sufferers, which assured them of the interest he felt, and his desire to attain that intimate knowledge of the disease which would enable him to administer his remedies understandingly. The

Abbé Correa da Serra remarks : "He was scrupulously attentive in the examination into the nature of disease, and gentle and kind in the treatment of his patients. It was his object to assist nature. Hazardous experiments did not enter into his plan of healing. This system is but little understood by those among whom he lived, but was the natural product of his own character."

The estimation in which he was held as a surgeon is proved by the minutes of the Managers of the Pennsylvania Hospital, in which they speak of his resignation as "unexpected and very much regretted by the Managers, who would gladly have embraced an opportunity of giving to a long-tried, experienced, and faithful practitioner a further proof of their confidence in his skill and abilities, by re-electing him to the office he had filled more than sixteen years with great reputation, had he not prevented them by declining to serve any longer."

The writer of this sketch can still recall vividly the impression made by him on his boyish imagination, and the deep hold upon his affections which was established by Dr. Wistar as the medical attendant in his father's family. The countenance beaming with affectionate interest in the suffering of the patient:—the gentle tones of endearment with which he soothed the anxieties and quieted the alarm of childhood:—the patient investigation of the symptoms, and the earnest effort to adapt his remedies so as to offend as little as possible the irritability of a sick and perverted taste, then much more difficult than now, will never be forgotten, and are as vividly present as when, more than forty years ago, they determined the adoption of his own course of life. These traits of character were natural. He was sincere and truthful; and the patient in the hospital, in the wards of which he was a faithful attendant during seventeen years, or the poor sufferer in an alley, received from him the same delicacy of attention as the proudest citizen who claimed his services for a fee. Indeed his disregard of the pecuniary recompense for his services was so great, that it not only prevented the accumulation of wealth for his family, but, whilst it gave a higher elevation to the esteem of the community for the philanthropy

of the profession, it was open to the censure of leading them to expect from others, who are more dependent on their own exertions for their support, the same self-sacrificing devotion to their interests as he had displayed.

We have seen that, from the commencement, Dr. Wistar was accustomed to give wide scope to the action of his mind. Chemistry, botany, and mineralogy were all studied with care, but anatomy, as the subject on which it became his duty to teach others, claimed his special attention. He published, for the benefit of his class, a work on Human Anatomy, which, for clearness and conciseness of description was unrivalled, and which retained its position as the text-book of all our medical schools, until the advances made in the modes of investigation and classification, and the changes in the modes of teaching, which have characterized the last thirty years, required another. The discovery made by him of the mode of development of the cells of the sphenoid bone, and their attachment in the early period of life to the ethmoid, was one which conferred honor on him as an investigator and discoverer, and in which he took unalloyed and great satisfaction.

With the exception of the work on Anatomy, he committed but little to the press. He sometimes wrote anonymous essays, and occasionally communicated his views over his own signature, through the daily papers, and the Transactions of the College of Physicians, and American Philosophical Society. Of this body he was always a zealous member, and was one of the Vice-Presidents from the year 1795; he was elected to the Presidency on the resignation of his intimate friend Thomas Jefferson, in 1815. He maintained a constant correspondence with men of eminence in science in other countries, as well as at home, and in every mode in his power labored to promote the cultivation of general knowledge. In the natural history of our own continent he was deeply interested, and was especially so in the investigation of those fossil remains which were then first claiming the attention of scientific men. The fifth volume of the new series of Transactions of the American Philosophical Society, published after his death, contains

an article from his pen on this subject, which he was the first to investigate in a scientific manner, and to which it was his intention to devote the leisure of his remaining years. He was interested, also, in the history of our own nation, and it was at his suggestion, and through his influence, that a committee of the American Philosophical Society was appointed for the purpose of collecting and preserving the scattered fragments which are essential to the perpetuation of our knowledge of the transactions of the past. The meetings of this committee he attended regularly, and one of his colleagues remarks, that it was the custom, after having despatched the business of the evening, to gather around the hearth, and enter into general and unrestrained conversation, in which he ever took the lead without intending it, and by his just remarks and interesting anecdotes, he would beguile the time, until warned by the unwelcome tolling of the midnight hour, that they were entering on another day.

Dr. Wistar's literary taste was good and elevated. Poetry had a charm for his maturer years as well as for his youth; but works of fiction he disregarded in his more earnest seeking for solid truth.

His opinions on government were in strong contrast with those of his family and friends and the social circle in which he moved. He embraced fully and decidedly the views of Mr. Jefferson. Yet he lived in harmony with those who differed from him on these subjects, at a time when party divisions were more violent and rancorous than even now; and those of both parties entertained for him that profound respect and warm affection which was equally creditable to him and them. His warmest friends, most devoted patients, and nearest relatives, were zealous advocates of the views of the Federal party. His sense of propriety taught him, as a medical practitioner, to avoid the obtrusion of his views upon others; and he was well aware of the incompatibility of political and medical studies and pursuits. He therefore never took any part in the former, beyond the expression of his views when occasion demanded it, and then in such manner as was least offensive.

His well-known popularity at one time induced the leaders of the Democratic party in Philadelphia to endeavor to persuade him to allow them to put him in nomination as their representative in Congress: this he positively refused. The Abbé Correa da Serra says: "A citizen, he loved his country; and among different modes of promoting her interests, he adopted the views of one party. Yet, free from all excitement, he was always ready to render justice to the motives and actions of those from whom he differed, whom he always met with kindness."

It remains for us only to notice the more private relations of Wistar to his family, and his views on the most important of all subjects, the responsibility of man to God. As may be readily inferred from what has been said, we need not shrink from the investigation of these relations, except as they are too sacred to be made the subject of prying curiosity.

Soon after his return from Europe, he was united in matrimony to Miss Isabella Marshall. Within two years, he was called to mourn her loss, with no child to perpetuate the alliance and solace his grief. It was not till after the lapse of eight years that he again married, Miss Elizabeth, daughter of George Mifflin, and niece of Thomas Mifflin, widely known as one of the Governors of this State. This estimable lady cheered the subsequent years of his life by her sympathy, and long survived him. Two sons and a daughter were the fruits of this union.

His delight in nature was as simple as that of a child, and furnished him unbounded gratification. A modest but beautiful country-residence afforded him a retreat from the toil and cares of his profession during the summer months, and it was here that he delighted to gather around him his family and friends. He was fond of children, whom he caressed, and thus disarmed their fears. Three times in his hands for surgical assistance, I can still remember the palpitating heart which he gently quieted by his kind and sympathizing manner, before resorting to the painful applications necessary for relief, and there are many now living in the decline of life, who still cherish similar reminiscences.

He never indulged, either while visiting his patients or elsewhere, in idle gossip about character; and when it was attempted in his presence would check it by the apt quotation of that noblest sentence of uninspired morality:—

“Who steals my purse, steals trash; 'tis something, nothing;
'Twas mine, 'tis his, and has been slave to thousands;
But he that filches from me my good name,
Robs me of that, which not enriches him,
And makes me poor indeed.”

The religious views of Dr. Wistar were those of the Society of Friends, modified by his large intercourse with the world. When his professional duties permitted, he ever joined with them in their meetings for worship once, at least, on the Lord's day, and he enjoined the same habit on his children, not as appropriate to their childhood only, but as the privilege and duty of man through life, and requested they would ever continue it. He urged upon his sons that, even should they adopt the medical profession, they would never allow their duty to their patients to furnish an apology for the neglect of this duty to God. Among the latest acts of his life was the postponement of other engagements to join in a religious meeting held at his own house by some travelling ministers of the Society of Friends. It was also his custom to take with him in his carriage, and read as he travelled either for pleasure or professional calls, a copy of the word of God which he especially valued, as the present of his early friend, Dr. Charles Stuart of Edinburgh; and, on such occasions, he commended the sacred teachings of the Gospel to the affectionate regard of his children, whom he frequently carried with him on short journeys.

His philanthropy was quiet and sincere, manifested not only in the discharge of his duty as a physician, but by a ready response to the call for aid in every mode by which want is accustomed to appeal for relief. His sympathy for the weak and oppressed found vent in his kind interest in the sad remnant of the Indian tribes, which, at that day, still lingered in wretch-

edness amid our frontier settlers, and frequently visited our great cities; while, in common with Franklin, and Rush, and every enlightened citizen of this, and many of the leading men of more southern States, he took a lively interest in the abolition of negro slavery here, and desired to promote the diffusion of those views which would lead to its extinction elsewhere as here, by the voluntary act of the masters themselves.

Having thus briefly described the character of Dr. Wistar, and narrated the principal events of his life, it only remains to record the circumstances of its close. During many years he had suffered more or less from symptoms which indicated an organic affection of the heart, which occasionally gave rise to attacks of dyspnœa. On this account he strove as much as possible to reduce the number of his patients and diminish the amount of his professional labor. He however entered on the duties of his professorship in the winter of 1818 with his usual energy. But about the middle of January he was seized with a fever which soon manifested those indications of prostration which gave rise to alarm. Dr. Horner, then his affectionate pupil, and subsequently the successor of Dr. Physick in the chair of anatomy, records:

“So long as reason maintained her seat, I heard him say, ‘Well, to-morrow I shall certainly be able to meet my class;’” and it was only by the watchful care of his friends he was prevented from the attempt. The last sentence he was heard to pronounce was, “I wish well to all mankind.”

On the 18th of January, 1818, Dr. Wistar died in the maturity of his intellectual force, and at the highest point to which earthly ambition can aspire. Beloved, respected, honored by all who knew him, his virtues had secured him the affections of his friends; his talents and industry the respect and esteem of the community in which he lived, and a reputation of no ordinary character in a wider circle; and, if in the struggle of life there had been personal jealousies and heart-burnings, they died with the individuals who were affected by them, leaving only a crown of honor placed on his brow by a grateful

posterity which cherishes his memory as that of one who, by the diligent discharge of duty in his generation, established his claim to be "held in everlasting remembrance." To adopt the language of the Abbé Correa da Serra: "His life was too short in the estimation of all who knew him. We may emphatically appropriate, as especially applicable to him, the expression already become trite, *MAGNUM SUI DESIDERIUM RELIQUIT.*"

CARPAR MORRIS.

JOHN SYNG DORSEY.

1783—1818.

NEARLY half a century has elapsed since Philadelphia was called upon to mourn the death of the subject of this memoir ; at the time universally regarded as one of the most able, talented, and promising members of the medical profession that America had yet produced. The event was so much the more deplored because of his many excellent social qualities and his remarkable personal popularity, as well as of his rapidly increasing fame and usefulness, to say nothing of the fact that he had just been elevated to one of the most honorable positions in the school in which, fifteen years previously, he had received his medical degree. Had he been spared to the age ordinarily allotted to the more favored portion of the race, he would, doubtless, have earned an undying fame as a great surgeon ; for he unquestionably possessed all the attributes of a superior mind, blended with the accomplishments of a varied, if not a profound, scholarship ; and he was, next to Physick, the very man to whom, above all others, the public everywhere looked as best qualified by nature, education, and opportunity to illustrate the character of the art and science of surgery in the first third of the nineteenth century in the United States.

John Syng Dorsey was born at Philadelphia on the 23d of December, 1783. Placed at school at an early age, he evinced extraordinary sprightliness of mind, acquiring knowledge with great facility, and soon outstripping most of his companions. It was in fact easy to predict that the boy would be a genius. His classical education was obtained at the Friends' Academy

on South Fourth Street, where he remained until the completion of his fifteenth year, pursuing his studies with unwonted ardor, and making more than ordinary proficiency, especially in the Latin language, for which he seemed to have had an unusual fondness. The English language and mathematics also formed prominent objects of inquiry with him. His conduct while at school was remarkably exemplary; and, although full of life and playfulness, he was rarely absent from the recitation-room.

Immediately after quitting the Academy, young Dorsey began the study of medicine, and for this purpose he entered the office of his maternal uncle, Dr. Philip Syng Physick, then just at the commencement of his brilliant career as a practitioner of surgery, and of that astonishing reputation which no American physician, whatever may be his talents or opportunities, may hereafter hope even to approach, much less to rival. His life was one of great and incessant labor; for, under the auspices of such a preceptor, only a short time before the favorite pupil of John Hunter, the most illustrious name in British Surgery, he could not have been idle even if he had felt so inclined, which, however, he never was. Intrusted with the ordinary text-books then in vogue, he had assigned to him his daily task of committing to memory the greater portion of what he read, in order that he might appear to proper advantage at the recitation on the morrow. The study of medicine in the latter part of the last century and the early part of the present, was a regular, systematic business with all conscientious private preceptors; the pupil was subjected to frequent examinations, was obliged to compound prescriptions, and was generally carried about to visit the more humble class of patients. From this routine of labor, even city students were not entirely exempt at that early day. One of the great requirements at that time was that the pupil should memorize what he read. Physick often boasted of having at his tongue's end the whole of Cullen's two volumes on the Practice of Medicine, and of some of his other text-books his knowledge was nearly equally intimate. Whether young Dorsey carried his lessons to the same extent, I have no means of judging, but it is certain that he studied

with uncommon diligence, and missed no opportunity of witnessing his uncle's practice, and of assisting him in his operations. Dissections also engaged a large share of his attention, and he became, at an early period of his pupilage, profoundly versed in practical anatomy, well knowing that a thorough knowledge of this science must form the basis of a finished medical education. Such were his industry and proficiency that, at nineteen, two years before he had attained the age required by the laws of the University of Pennsylvania for graduation, he was considered as fully qualified to take his degree, and the Trustees, at the instance of the Faculty, accordingly conferred upon him, in the spring of 1802, the honors of the doctorate. His inaugural dissertation was upon "The Powers of the Gastric Juice as a Solvent of Urinary Calculi," in which he embodied the results of some very ingenious original experiments, and which was subsequently published in a volume of Theses, edited by the late Dr. Charles Caldwell.

The yellow fever breaking out soon after he received his degree, Dr. Dorsey was appointed one of the resident physicians of the City Hospital, a situation in which, by his assiduity, skill, and devotion to the sick, he gained the good opinion of every one concerned, and showed, by his fearless conduct, that he was no believer in the contagiousness of that singular, and hitherto unexplained, disease. So firm, indeed, was his conviction upon this subject, that he frequently exposed himself in the most reckless manner, with a view of courting infection. The epidemic, however, finally disappeared without touching him.

Being still too young to begin the practice of medicine and surgery on his own responsibility, Dorsey, in November, 1803, set sail for Europe, intending to divide the time during his absence between London and Paris. After a voyage of nineteen days, undistinguished by any incidents of importance, the vessel on which he had embarked arrived in soundings, but owing to heavy fogs, was unable to effect a landing until the 31st of December. At Sheerness, twenty miles from the mouth of the Thames, the passengers were obliged to remain at quar-

antine for one week. Upon reaching London, he lost no time in delivering his letters of introduction, among others, one to Mr., afterward Sir Everard Home, an old friend of Physick, and in repairing to St. George's Hospital, the scene of the labors of John Hunter, and also of his uncle during his residence in the British metropolis. Here he found that he should be compelled to pay twenty guineas for the privilege of seeing the practice of the house, five guineas each to two lecturers, six guineas for admission into the dissecting-rooms, and three guineas for every subject he might use; an aggregate sum of nearly two hundred dollars, an amount, it would seem, far beyond his calculations, and making sad inroads upon his scanty means.

Soon after settling in London, he received a visit from the famous Dr. Lettsom, then considerably advanced in years, who was anxious to have a conversation with him respecting the nature of the yellow fever, which had prevailed the previous summer in Philadelphia, and which, as stated in a preceding paragraph, Dorsey had so well studied during his residence at the City Hospital. The British physician was about to publish a paper upon the subject, and he freely availed himself, for that purpose, of the knowledge of his young transatlantic brother, although the latter had brought no letters to him.

Writing to a friend in this city, under date of the 21st of March, Dorsey observes: "I am very fortunate in being situated in Mr. Nicholson's house. He is Home's particular friend, and very sensible, and I trust I derive some advantage from his conversation. He is the nephew of a Scotch general whom I met at Home's,—General Frazer, a veteran, who lost an eye at the battle of Germantown in the Revolutionary war. He is fond of Americans, and has treated me with very great politeness."

. . . "Home continues to treat me very kindly. He lately introduced me to Sir Joseph Banks at one of his *conversations*, which are held every Sunday evening, and are attended by all the literati of London. He has given me his ticket of admission to the Royal Institution for the season, where I hear chemical

lectures in the evening, and where a vast number of ladies and gentlemen, and nobles collect to listen to Mr. Davy and the other lecturers. The reputation of this Institution has increased so much that the price of subscription which was £50 is now £120, and this sum purchases only two tickets of admission to the reading-room, and lectures, and laboratory, all of which are very splendid. The theatre, where the lectures are read, is capable of containing nine hundred persons, and is often full. I commonly see from two to three hundred ladies and gentlemen. The street about the door is crowded with coaches and chariots, with coronets, &c., so fashionable a science is chemistry."

It is interesting to know that the Mr. Davy, mentioned in the above extract, was the poor Cornwall boy, the son of a carver in wood at Penzance, and the apprentice of an apothecary, who, then hardly twenty-five years of age, was just entering upon that glorious career of discovery and usefulness, which made him the great philosopher and chemist of his age, and one of the most brilliant lecturers and experimenters the world has ever produced. The vast audiences which he already drew when Dorsey heard him at the Royal Institution, the resort of the gay and fashionable circles of the English metropolis, were a testimonial, such as no young man probably ever received before or since.

The opinion which Dr. Dorsey formed of the surgeons of London was not always very flattering. Writing on the 17th of March, he says: "Home let me into a wonderful secret to-day, which is that, in operating on the eye, we should always wait till it becomes fixed. This Dr. Physick has taught his pupils these five years. Home thinks that in one of a hundred cases the artificial pupil may succeed. I saw it succeed in three cases out of three." This allusion is evidently to the practice of his uncle.

"This morning Mr. G., one of the surgeons of St. George's, trepanned a woman at Dr. P.'s request. She had been some time in the Hospital with most obstinate headache. He sawed away till he got through the skull and dura mater; they both

came out together, and the chances are ten to one that the woman will die. Is not this licensed murder? One learns, however, from other people's blunders."

He considered Home and Cooper as the only really good surgeons he had met with in London; all the rest he thought very indifferent, and some positively bad. As to the science and practice of surgery, his opinion was that we were in advance of our British brethren.

Arriving at London in mid-winter, when the lecturing season was in full operation, Dorsey devoted himself diligently to his professional pursuits, eschewing almost entirely general society and public amusements. As soon, however, as the sessions of the schools had fairly terminated, he found himself at leisure to accept the invitations of some of his friends, and to visit the theatres, the Houses of Parliament, and other places of interest.

In April, he was present at the anniversary dinner of the Royal Humane Society, at the London Tavern, a most interesting and delightful occasion, the company numbering about three hundred, and the table literally groaning under every possible delicacy of the season, Dr. Lettsom, the Quaker doctor, as he was styled, presiding. From twenty to thirty persons, restored to life by the exertions of the Society the previous year, were present, and walked in procession after dinner, each carrying a Bible, bearing upon its back, in large gold letters, the following inscription: "The gift of the Royal Humane Society, instituted 1774." Since the commencement of the Society's efforts, Dorsey adds, 2859 persons, apparently dead, had been resuscitated.

In May he visited the House of Commons, where, as he expresses it, he luckily heard the most celebrated speakers of the day, as Fox, Pitt, Addington, Tierney, Canning, Poultney, and several others. "The eloquence of Pitt," he remarks, "is beyond everything. Fox's rapid and persuasive manner is far less graceful and commanding than the smooth, easy flowing style of his rival; but they are both far, very far superior to any other men, perhaps, now living. Fox, however, will

have no share in the administration, and the wits say he is caught in his own trap. Pitt has taken the oath of office, and is now prime minister."

A visit to Somerset House, to witness the exhibition of paintings by the Royal Academy, afforded him but little gratification; few of the pieces displayed any genuine artistic skill, and there was, withal, very little variety, the great majority being portraits.

Invited to spend an evening with Dr. Lettsom, at his residence, three miles from London, Dorsey found himself in the midst of five hundred persons. The cards had been issued three weeks previously. The house was large, the company intelligent and fashionable, the supper elegant, the whole scene charming. The strawberries provided for the occasion, but then out of season, cost about nine pence a piece,—a pretty little sum for a London doctor! The party was a *conversazione*, and well did it fulfil its object. "The chattering of the ladies," says Dorsey, "pleased me much better than a lecture of an hour on an eclipse, an Egyptian mummy, a rusty medal, or the horizontal parallax."

We give one more extract illustrative of his doings in London: "Home laughs at my spring-lancet, which is ugly enough; I never had but the one, and this is, at present, very dirty for the want of use. He calls it the doctor's mode of bleeding! He is very friendly to me. His wife gives me occasionally lessons of great use to my manners, always at my particular request. She is extremely *etiquettical*, and I am always making some awkward blunder; for instance, in handing Miss Thomson, her daughter, out of the carriage, I landed her in the gutter. She asked me to accompany them to the theatre, and we were seated in the stage-box. I went without a cocked-hat, because I had none, and Nicholson's, which I commonly use on such occasions, was locked up, and he from home. We dined on turbot some days ago, and I unluckily asked Mrs. Home for some *soal*! Last week, I dined there with stockings of a nankeen color, which are very dashing, and I thought I was quite stylish; Mr. Home insisted that I

had on Mrs. St. Leger's stockings, one of the Covent Garden performers. But all these are great lessons, and I shall never again sport yellow stockings at Mr. Home's. He enjoys laughing more than anybody I know, and forces all his company to laugh at his puns and odd remarks."

Home, whose name occurs so often in the foregoing extracts, was a brother-in-law of the celebrated John Hunter, under whom he studied his profession. He was a native of Greenlaw Castle, in the county of Berwick, and after receiving his license, he practised surgery, with great eclat, in the British metropolis for more than forty years. He was the author of a voluminous treatise on Comparative Anatomy, and of various works on Surgery, besides contributing numerous articles to "The Philosophical Transactions of London," and to different medical periodicals. Raised to the dignity of a baronet in 1813, he was sergent-surgeon to George IV, and afterwards to William IV, and for many years President of the Royal College of Surgeons. He died in 1832. After his death, it was proved, before a committee of the House of Commons, that he had burnt some of Mr. Hunter's papers, having, as was supposed, previously availed himself of their contents. To this man, rendered infamous by this act of treachery, Dorsey carried a letter of introduction from Physick, who had made his acquaintance during his sojourn in London ten years previously, and thus arose that interchange of civilities so frequently referred to by the young American in his letters to his friends at home.

Quitting London, Dorsey travelled by way of Holland to Paris, where he arrived on the 30th of June. He found France, to use his own expression, a very curious kind of country, all the ideas which he had formed respecting it being erroneous. "I supposed," says he, "Europe, in every part of it through which I should travel, to be very thickly settled; but, instead of this, there are miles of road without a house on either side. The fact is, villages are very numerous, and people do not live so scattered as in America. Most of the towns bear strong marks of the wars by which they have suf-

ferred." It appears that he found less difficulty with the French language than he had anticipated before he went to Paris. In London, he had taken lessons from Poisson, an eminent teacher, and the knowledge thus acquired proved to be of great use to him.

One morning, soon after reaching Paris, he fell in with Dr. Guillotin, the inventor of the horrid instrument which bears his name. "He is a venerable looking old man," he says, "and an old friend of Dr. Franklin. I saw some of Dr. Franklin's letters to him."

On the 9th of August, he writes: "I go to the Ecole de Médecine, which contains a fine library and an extensive museum, three days in the week, to read: it is open on Mondays, Wednesdays, and Fridays, from 10 to 2 o'clock. On the intermediate days, I go at 10 to the Hospice de l'Ecole de Médecine. This was formerly a nunnery, but the building is now applied to a better purpose. I prefer this hospital, not from hearsay, but because I am convinced that all that can be learned from the French is the operative and mechanical part of surgery, and Dubois, who operates here, is confessedly the first in that department. I have taken notes of his operations, which I shall carry home. The number of patients in this hospital is small compared with that of the Hôtel Dieu."

Through the influence of Boyer, surgeon-in-chief of La Charité, Dorsey obtained leave to dissect in the "Salle de Repos," the most elegant name, he thought, ever bestowed upon so vile a place. The enthusiasm and self-sacrifice which he evinced in his anatomical pursuits will appear from the following extract from one of his letters: "I have succeeded at last in dissecting the ear. It was two Sundays ago I was to have seen a most splendid review by the Emperor, but as I was fortunate enough to trace the origin and insertion of the stapedius and tensor tympani, and to show all the cavities of the ear very completely, I was so delighted as to forego the splendor of the scene in the Tuileries for that in the Salle de Repos."

"As to French surgery, I have learned nothing from it."

The hospitals are large, but not so clean as could be wished. A dresser of Boyer's was removing a bandage from a fractured leg the other day, when, upon lifting the first turn, a nest of about a dozen bugs took the alarm and dispersed themselves over the bed. Fractures turn out very well and straight. The after-treatment of operations is very bad ; and in operating, they seldom save skin enough. This I must say,—they are not scared at trifles. I saw the radial artery cut in removing a tumor ; the hemorrhage was very great, and Mons. Dubois, very coolly, took up the vessel in a pair of forceps, for they use neither the tenaculum nor needle here, and secured it. But of all the cruel operations I ever witnessed, I never saw one which gave me more pain than one performed by Dubois for the cure of *tic douloureux*. It consisted in applying a piece of dry moxa to the most painful part of the face. This was set on fire, and suffered to burn to ashes, in spite of all the patient's agony. How he could submit to it I cannot conceive. I really thought the bust of old Ambrose Paré, which was directly over his head, frowned with indignation at the cruelty. The reason assigned for not using the caustic is that the slough will be deeper."

The following anecdotes, with which we bring these extracts to a close, are interesting and worthy of preservation. Alluding to Mr. McClure, the naturalist, and one of the commissioners sent to Paris, by Mr. Jefferson, to settle the Louisiana questions, whose acquaintance he had the good fortune to make at Paris, and whom he regarded as one of the most sensible men he had ever met with, he states that, upon leaving America, he had been intrusted by Dr. — with a box for Professor Fabricius, of Sweden, a great insect-monger, and by all accounts a most learned character. "McClure took great care of the box ; and, calling upon the savant, he was ushered into the presence of several literati, convened on the occasion. They were all eager to see the contents of the box, and, as Virgil says, '*Intenta que ora tenebant.*' McClure procured it. Fabricius trembled while he opened it. *Montes parturiunt nascitur mus!* No sooner had he removed the lid than the

box fell from his hand. He coolly thanked Mr. McClure for his attention to the doctor's commands, but thought his countryman might have sent him something else than a potato-fly!

"I have seen his Imperial Majesty. He is extremely plain in his dress, and the people generally are much more so than formerly. The lower classes are many of them gaudy. I was much diverted in walking through a small dirty alley to see a fishmonger selling carp, and a barber behind him dressing his head! but powder is almost universally worn by middle-aged people. A beggar accosted me in the street, with his head elegantly dressed and a cocked hat upon it, and solicited alms. I did not at first comprehend him, being a bad French scholar, but bowed civilly with, *Monsieur je vous souhaite le bon jour*, but my civility did not do; he wanted alms, and to do the beggars justice they speak plainer French than any other people."

It is somewhat surprising that Dorsey, in his letters from Paris, makes no allusion to any other surgeons than Dubois and Boyer. He could certainly not have overlooked Sabatier, who, although far advanced in life, was still connected, at the time of his visit, with the Hôtel Dieu. His great work on Operative Surgery must have been the text-book on that subject in the French metropolis; and one would suppose that Yankee curiosity, if nothing else, would have prompted the young American to seek out the author who was hardly more distinguished for his professional than for his general scholarship. He was not only well acquainted with Greek and Latin, but was also familiar with the English, Italian, and German languages, conversing fluently in all. He was one of the surgeons of Napoleon, and one of the first upon whom that great man bestowed the cross of the Legion of Honor. He died in 1811, leaving behind him an imperishable name.

Dubois was better known, in his day, as an obstetrician than as a surgeon. It was he who attended Maria Louisa in her perilous confinement, and who, fearing the result, asked the Emperor which he should attempt to save, in the event of necessity, the mother or the child. The answer of the

monarch is well known : "The mother, if either must be sacrificed."

Boyer was chief surgeon at La Charité, a dull lecturer and a heavy operator, but a man of vast science and attainment. His anatomical and surgical writings have given him an enduring world-wide reputation.

Dorsey is equally silent about Dupuytren, who, a young man at the time of his visit, was destined to play so illustrious a figure, as the greatest surgeon France has ever produced. He had been elected assistant-surgeon to the Hôtel Dieu in 1803, and must have been a very busy personage, even at that period, although he was the senior of Dorsey only by six years. Pelletan, another glorious name in surgery, was, at that time, and up to 1815, when he was succeeded by Dupuytren, surgeon-in-chief of the Hôtel Dieu. Desault, a child of genius, rich in talent, melancholy, and ill at ease in the gay and fashionable world around him, had died, and Bichat, his illustrious pupil, the founder of general anatomy, had followed him only a short time before Dorsey's visit.

On the 25th of October, 1804, Dr. Dorsey found himself on board the ship "Old Tom," in Hampton Roads, on his voyage to Philadelphia, where he arrived in the following month, after an absence of one year, spent for the most part in active and arduous studies. Immediately upon his return, he opened an office in his native city, and by his assiduous attention and affable deportment, so essential to success, soon acquired business, although a considerable time elapsed before it became at all lucrative, notwithstanding he enjoyed largely the influence of his uncle, whom, as during his pupilage, he again assisted in his operations and private practice. In 1807, at the age of twenty-four, he was appointed adjunct-professor of surgery in the University of Pennsylvania, an office rendered necessary on account of the frequent indisposition of Dr. Physick, the principal. The new duties thus devolved upon him, at a period of life when most young men are still pursuing their elementary studies, were discharged with the most scrupulous fidelity. He was obliged not only to prepare the subject for

the demonstrations in the amphitheatre, but, whenever his uncle was unable to attend, also to lecture. Young and inexperienced as he was as a teacher, such was his knowledge of the human frame and the principles and practice of surgery, that he took at once a firm stand in his new position, winning the confidence, and even eliciting the admiration of his pupils. His articulation, at first rapid and somewhat confused, by reason of a natural impediment in his speech, became gradually more easy and distinct; and his manner, originally embarrassed, composed and dignified. It was evident that he was destined to make his mark as a brilliant teacher, and every day he acquired new popularity and new friends. His industry and enthusiasm knew no bounds. His whole soul was engrossed by his profession, and from this nothing could divert his attention, neither the blandishments of society nor the syren voice of pleasure.

Notwithstanding his numerous and arduous occupations, Dr. Dorsey found leisure, in 1807, to marry Maria, daughter of Robert Ralston, Esq., a merchant of this city, distinguished for his benevolence and acts of public generosity. By this alliance he had three children, a son and two daughters, who still survive. The former, speaking of his father at this time in a MS. sketch of his life, kindly placed at my disposal, observes: "Dr. Dorsey's efforts to attain professional eminence now began to meet with that signal success to which intelligent perseverance entitled them, and he was in the midst of a large practice." Mrs. Dorsey died in 1833, mourned by a large circle of devoted friends.

It was about this period that Dorsey commenced the preparation of his "Elements of Surgery," which were finally published in 1813, in two small octavo volumes, illustrated by engravings. Of the character of this work, the success of which was complete, further mention will be made presently. It is sufficient now to state that it greatly enhanced the reputation of the author, and readily led to the acquisition of business. It is proper to add that he had received, several years previously, the appointment of surgeon to the Pennsylvania Hospital; a

position peculiarly gratifying to his feelings, as it afforded him an additional field for clinical observation, so necessary to one engaged in expounding the principles of the art and science of surgery.

In the same year in which he made his debut as an author, he was appointed to the chair of *Materia Medica* in the University of Pennsylvania, rendered vacant by the transfer of Dr. Chapman to the professorship of Medicine, the incumbent of which, Dr. Benjamin Smith Barton, well-known as an eminent teacher, practitioner, and naturalist, had recently died. Shortly after entering upon the duties of his chair, he published a "Syllabus of his Course of Lectures," for the benefit of his pupils, giving a systematic classification of the various articles of the *materia medica*, with a succinct account of their virtues and doses. This appointment he filled until the spring of 1818, when, upon the death of the venerable and lamented Wistar, he was chosen as his successor in the chair of Anatomy; a department of science which he had already previously assisted in illustrating as the adjunct of Physick; and which, by his subsequent experience as a teacher, he was now so well calculated to adorn. But Providence had ordained otherwise. The new incumbent was hardly permitted even to open the doors of his new office. Death, intent upon an illustrious victim, struck him down in the midst of his fondest hopes and anticipations, consigning him to an untimely grave; and thus blasting forever the cherished expectations, not only of his family and intimate friends, but of the citizens of Philadelphia and of the whole American medical profession.

Dr. Dorsey early became an author. His "Elements of Surgery" were published in 1813, in two octavo volumes, when he was hardly thirty years of age. The work, intended chiefly for the use of students and junior practitioners, was received with much favor both at home and abroad. For a long time it was the only text-book of our schools, and it was not until after the appearance of the *Institutes of Surgery* by Dr. Gibson, that it finally lost its hold upon the affection of the pupil. It was early reprinted at Edinburgh, in whose university it

long maintained its supremacy in the class-room. A second edition was issued by the author in 1818, only a few days before his lamented death; and, in 1823, a third edition appeared, with notes by Dr. J. Randolph, himself afterwards so distinguished as a skilful and accomplished surgeon. For many years the work has been out of print; and having served its day and generation, it is destined to sleep quietly upon the shelf in company with similar productions in other departments of science and literature, proud at having achieved the objects of its mission.

In looking at the "Elements of Surgery" in a critical point of view, there are several circumstances especially deserving of notice. In the first place, the work was written when Dorsey was quite a young man, and, consequently, at an age when he could not have had the benefit of an enlarged personal experience. He had, it is true, enjoyed the advantages, both as pupil and relative, of the practice of Dr. Physick, at that time, as well as for many years afterwards, the most extensive and diversified in the country; attracting, as he did, cases from all sections of the Union; he had been a diligent student at the Pennsylvania Hospital, and during his residence abroad he was a constant attendant upon the charitable institutions of London and Paris. Moreover, soon after his return from Europe he was appointed Surgeon to the Pennsylvania Hospital, and rapidly acquired business as a private practitioner. These circumstances, then, notwithstanding his youth, peculiarly qualified him for the responsible task he had undertaken of composing an elementary treatise on surgery; a book that should supply a want in the medical literature of the country.

Secondly, the author was perfectly familiar with the surgical literature of England and France, and could therefore avail himself of the resources of those countries in the composition of his work; and this, in fact, constitutes one of its most valuable features. The volumes everywhere exhibit evidence of the liberal use which he made of the labors of our transatlantic brethren, without sharing any of the prejudices and jealousies which at that time existed between the English and French;

and which, even at this day, are not entirely uprooted. The author acknowledged, in an especial manner, his obligations to John Hunter, Benjamin Bell, Desault, and Boyer, of whose surgical writings the practitioners of the United States were, until then, almost wholly ignorant. He often borrowed whole passages from them, or limited himself to condensing and paraphrasing their import, interspersed with his own views or those of Physick, whose methods and results of practice figure largely throughout the work.

Thirdly, the style of the work is a model of simplicity, plain and easy of comprehension, without the slightest attempt at ornament, and therefore admirably adapted to the wants of the student, the more so because it was eminently practical. The first edition was issued hastily, as is proved by the numerous errors, literary and typographical, which disfigure its pages. The plates illustrative of the work were designed and engraved principally by Dorsey himself, and in a style which, considering the state of the art at the time, did great credit to his taste and skill.

Finally, the success of the Elements was complete, indeed triumphant, as is established by the fact that it was universally employed as a text-book in the schools of this country and also in the University of Edinburgh; and by the circumstance that in the course of ten years it passed through three large editions, the last after the decease of the author. Much of this success was doubtless due to the compendious form of the work and the simplicity of its style, to the fact that it comprised a full abstract of the views and experience of the "Father of American Surgery," the illustrious uncle of the author, and to the absence of foreign and domestic competitors. The system of republication, since so extensively carried on in this country, was then in an embryotic state; and the only native work on surgery was the little hand-book, issued towards the close of the last century by Dr. John Jones, at one time professor of surgery at New York, and subsequently the family physician of Washington during the residence of that great and good man in this city. Had Dorsey's life been spared ten years

longer, it cannot be doubted that he would have produced a great work destined to reflect the state of surgical science and literature in the early part of the nineteenth century, and to transmit his name to the remotest ages as a great surgical author. As it was, he is justly entitled to the honor of having been the pioneer in this branch of literature in the United States.

Dorsey was an occasional contributor to the periodical press, medical, literary, and scientific. In 1811, he communicated to the second volume of "The Eclectic Repertory and Analytical Review," the first medical journal ever established in this city, the particulars of a case of inguinal aneurism, cured by tying the external iliac artery, the first example of the kind that had occurred in this country. Mr. Abernethy, of London, had performed a similar operation in 1796, in a case of aneurism of the femoral artery, but the patient died of the effects; and it was not until 1806, after two other attempts, that his skill was finally crowned with success. Dorsey's patient was thirty years of age, and the tumor, which had been forming for nearly two years, was of uncommon size, its shortest diameter being four inches, and the longest nearly five. The operation was executed with the greatest care, in the presence of Dr. Physick and Dr. Hartshorne, and it was estimated that not half an ounce of blood was lost. In passing the ligature, which came away on the fourteenth day, great aid was derived from the use of a flexible blunt bodkin, inserted into the jaws of a pair of curved forceps, known as the instrument devised by Physick for securing the pudic artery, when wounded in lithotomy. The report of the case, an abstract of which was afterwards transferred to the "Elements of Surgery," was accompanied by a graphic drawing.

In the eighth volume of the same work is to be found an "account of a large wen," successfully extirpated by Dorsey, the paper having originally been published in the "Transactions of the American Philosophical Society," in the first volume of its new series. The case was remarkable chiefly on account of the extraordinary bulk of the tumor, its circumfe-

rence at the thickest part, vertically, being nearly four feet, and horizontally three feet one inch and a half. It was attached, by a broad base, to the upper part of the back, and gave the patient, a negress forty-five years of age, the appearance in walking as if she were carrying a large and heavy sac. Its weight, after removal, was twenty-five pounds. Although described under the vague name of "wen," it was doubtless of a fatty nature; a circumstance rendered the more probable by its immense bulk, its pendulous form, its tardy growth, and its innocuous character. The bleeding was said to have been very insignificant, owing, as was supposed, to the fact that the patient, fifteen minutes before the operation was commenced, was placed, at the suggestion of Physick, on her face on the table, while assistants were directed to elevate and compress the tumor in such a manner as to empty it as completely as possible of blood. "I was greatly delighted," says Dorsey, "to perceive the change in the size of the superficial veins, which resulted from this simple expedient; many of them contracted, and could not be discerned."

His literary contributions appeared chiefly in "The Portfolio," published in this city under the editorial supervision of Joseph Dennie, and at that time the only literary periodical of any note in the United States. The journal had a wide circulation, and was everywhere, both at home and abroad, regarded as the exponent of American taste, talent, and criticism. To its pages Dorsey occasionally sent a poetic effusion, generally dashed off in the leisure moments of his practice, without, it may be supposed, much study or care in regard to composition. Most of the pieces are, nevertheless, characterized by uncommon rhythmical beauty, force of expression, and purity of sentiment, and would be worthy, were they collected, of a permanent place in our lighter literature. The poem, entitled, "Reflections on the Incomprehensibility of God," written in 1805, when the author was in the twenty-second year of his age, embodies uncommon vigor of thought and power of description, and breathes throughout a feeling of piety worthy of Dante and of Milton. It com-

prises nearly two hundred lines, and bears the marks of having been written with unusual care.

In 1806, Dorsey took leave of his muse, in a valedictory address, in which he forcibly depicts her artful wiles, and the importance of yielding himself up to the more solid studies of Locke, Newton, Hunter, and other great lights of modern philosophy and science. That he was not, however, able altogether to resist her blandishments, appears by the fact that he occasionally, after this period, indulged his taste for versification. A fondness for poetry was evidently deeply implanted in his breast; and although he felt that his muse was a dangerous companion, he found it impossible wholly to abandon her. Even his prose writings strongly partook of the poetical. His Introductory Lecture to the course of anatomy, in the University of Pennsylvania, delivered only a few hours before he was seized with his fatal illness, is replete with evidences of the inspiration of his muse. The subjoined extracts from this discourse, which has, I believe, never been printed, will serve to show how beautifully the newly elected teacher portrayed the uses of anatomy before his young auditors, and how he would have infused life and vigor into the dead subject as it lay before him, on the table in the amphitheatre, had he been spared to enter fully upon his professorial labors.

“Placed in a world in which we find ourselves at the head of creation,—‘a little lower than the angels,’—but superior, very far superior to all other animated beings which surround us, it is in every respect proper that we should know ourselves, and what was intended by the poet to express the importance of an acquaintance with the mind of man, is equally true with respect to his corporeal organs and functions. In every sense, ‘the proper study of mankind is man.’ Man is justly considered the most perfect animal. He possesses faculties and organs, many of which are peculiar to himself; some, however, he enjoys in common with the brutes, and in some the lower orders of animals surpass him. He can neither soar with the eagle, nor follow the finny tribes through the depths of ocean. His smell is less acute than that of the greyhound, his sight less piercing

than the hawk's. In strength he is surpassed by the elephant, in fleetness by the reindeer. The reasons are obvious,—his mental powers render these endowments useless, and place them all at his command. He has dominion 'over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth.' All are made tributary to his wants and even his caprices. Should it be demanded,

'Why has not man a microscopic eye?'

The answer is a good one—

'For this plain reason—man is not a fly.'

"The various organs which compose the human structure cannot be comprehended unless they are very distinctly seen; and for the purpose of exposing them to view, various artifices have been contrived, by which different kinds of organization are rendered obvious. For this purpose, the anatomist has recourse to dead bodies, the different parts of which are in succession exhibited and explained. In this species of intercourse with the dead, much violence is done to our natural feelings. An instinctive horror of death seems recognized by the whole human race. It was the curse pronounced on sin; it is a state to which we are all doomed; a state full of mystery, and one which ushers us into new modes of existence, of which we can now have no distinct conceptions:—

'Through what variety of untried being,
Through what new scenes and changes must we pass!'

These are considerations which render it impossible for living man to approach with indifference the confines of the tomb.

"There are other points of view from which the task appears loathsome and disgusting. To seek for knowledge 'mid skulls and coffins, epitaphs and worms;' to behold the changes which the fair frame of beauty is destined to suffer; the ruddy glow of health changed to the dim hue of putrefaction—

'Whilst surfeited upon the damask cheek,
The high-fed worm, in lazy volumes rolled,
Riots unscared ;'———

To contemplate the lifeless carcase when deserted by the soul, and reduced to a 'clay clod lump,' is surely enough to excite sensations of disgust and horror; and yet, gentlemen, these are the objects to which the anatomist invites you; with them you must learn to be familiar.

"The anatomist has no field for the display of fancy; with him every subject is detailed as plain matter of fact. No oratorical displays of rhetoric or eloquence can aid him to enliven your attention; his eloquence is of the hand; his rhetoric of the scalpel! But when years shall have rolled away, and when your memory shall be tasked to recall the vestiges of scholastic learning, when your teacher's tongue shall be silent, and his hand motionless, then the impressions derived through the medium of your senses will be found fresh and vivid, long after the collections of impassioned oratory shall have faded from your minds.

"And now, gentlemen, I beg leave for a moment to call your attention from the subject, to those who have taught it. The professorship to which I have been elected in this school, was originally founded by the exertions of Dr. William Shippen, a gentleman in whom were combined, in a remarkable degree, the varied talents necessary to form a teacher.

"His descriptive powers and fascinating eloquence riveted the attention of his pupils, and impressed with indelible force the lessons he inculcated. His successor* is fresh in the recollection of most of those whom I have the honor to address. With devotion to his arduous duties, he founded for himself a character of such unsullied excellence, that envy itself would in vain attempt to tarnish its lustre. Learned, accomplished, and amiable, he was master of his subject, and master of his

* Dr. Caspar Wistar.

pupils. Their feelings and their intellects acknowledged his away ; these he enlightened by the purest rays of science, and those he captivated by the unaffected benevolence of his heart.

"He was not one of those described by a late writer, ' professors enjoying the admiration of their young pupils, assuming a decided and dictatorial character, affecting to have gone to the bottom of everything, and to have overcome every difficulty, either by the natural powers of their own minds, or by severity of study, and perseverance in the pursuit of knowledge.' No ! he was modest, and whenever doubts or difficulties existed, he acknowledged them, and ' if truth lay beyond his reach, he confessed his ignorance with a decent and becoming sense of the imperfections of human nature.'

"Were I to attempt a sketch of his method of teaching, I should say that its striking feature was extreme solicitude to force upon each of his pupils a knowledge of his subject, and an utter disregard to every meretricious method of enhancing his own reputation, by obtrusive displays of his learning or accomplishments. Happy had it been for you, gentlemen, happy for the University of Pennsylvania, and happy for the interests of science, if his life had been prolonged till some successor, worthy of such a station, had been raised to take his place.

"The present incumbent is well aware that much strength must be necessary to flex the bow of Ulysses ; yet he ventures without affectation of diffidence to attempt it, and not without a hope that at a future day he shall have achieved by diligence, some better claims to his present distinction. All he can even promise is his honest, zealous, and unremitting effort to discharge those duties, heretofore performed by men whose memories are embalmed in the heart of every votary to medical science, and whose glory, no longer in its zenith, still casts some lingering beams around the horizon, once illuminated by their noontide splendor."

The personal popularity of Dorsey was very great. The warmth of his manner, his kind and genial disposition, his enthusiasm, the charm which he threw around his subject, his well-known honesty, and the uncommon interest which he evinced in

the instruction of his pupils, all conspired to render him the idol of his classes, both public and private. After his death, his private students, of whom he always had a large number, united in a subscription to defray the expenses of a portrait, painted by Thomas Sully, and engraved by Goodman and Pigot, as a memorial of their beloved preceptor. The likeness, which is said to have been a very correct one, represents Dorsey with a large white cravat and ruffled shirt, with a black coat, the collar of which was of enormous dimensions, strikingly in contrast with the narrow cervical apology worn at the present day.

In person, Dorsey was eminently handsome. He was of medium height, with a decided tendency, a few years before his death, to corpulency. His features were broad and intellectual, his nose prominent, his lips large, and his chin well rounded off. The eyes were blue and sparkling with intelligence, the forehead was ample, and the hair, which was somewhat brownish, fell negligently, in a large cue over his collar, in accordance with the fashion of the times. The impediment in his speech, contracted in early life, if, indeed, it was not congenital, was, as has been already seen, perfectly overcome long before he died.

His mind was evidently of a high order, and well stored with varied knowledge. His conversational powers were remarkable. No one approached him without being fascinated; and, on convivial occasions, he was the life and soul of the company. He had a decided taste for music, which he cultivated with much ardor in early life, and for which he always cherished a warm regard. It was said that he could perform well on several instruments. He also evinced a marked partiality for poetry, but I am not aware that he has left anything, except some fugitive pieces, of special merit or interest, in this department of literature, for the cultivation of which the arduous duties of a practitioner's life seldom afford any leisure.

As a draughtsman he possessed unusual talent, and could he have indulged his taste and inclination, it is more than probable that he would have attained to distinguished eminence as

a painter and an engraver. It has already been seen that he alone supplied the plates for his work on Surgery; and several landscapes, still in the possession of his descendants, attest the power of his brush. With a mind so versatile, so susceptible to the beauties of Nature, it was not surprising that he should have been passionately fond of music, poetry, and the fine arts.

Rich in knowledge, eminently self-possessed, and fertile in resources, aided by a retentive memory and a fluent elocution, there were few men among Dorsey's contemporaries, who could successfully cope with him in debate, or in the systematic discussion of a professional topic. His displays before the Philadelphia Medical Society, comprising many of the master-spirits of the day, were generally highly creditable and effective efforts. "As a debater," says Dr. Chapman, in his eulogy delivered before the medical class, in 1819,—a gentleman who knew him well and intimately, and who loved him as a brother,—“he never had a superior among us. The style of his speaking was peculiar and distinctive. Destitute of rhetorical pretensions, it had the character of warm and elevated conversation, and while it was sufficiently strong to cope with the most powerful, it was intelligible by its simplicity to the meanest capacity. Equally adroit in attack or defence, the resources he exhibited in these contests, and especially when pressed by the weight of an adversary, were surprising, and often drew forth strong expressions of admiration and applause. It has been objected to his speaking that, though always ingenious and forcible, it was occasionally loose and desultory. But this defect was visible only in those *ex tempore* effusions, which escaped from him without premeditation or reflection, and proceeded in great measure from the fecundity of his genius, and the copiousness of his matter. Teeming with ideas, and exuberant in facts, he could not always preserve his arrangement, nor the chain of his reasoning, perspicuous and consecutive.”

As a surgeon, considered in the more lofty sense of that term, his ability shone forth with peculiar lustre. Eminently conservative in his practice, he never hesitated to employ the

knife, when he found he could no longer rely upon his therapeutic resources, and it was upon such occasions that he evinced the highest talent in the art of the operator. Endowed with a firm and vigorous mind, thoroughly acquainted with relative anatomy, and early habituated to the sight of blood, he went about his task with an unflinching eye, and a hand that never trembled, however trying the occasion, or unexpected the emergency. In short, he was a brilliant operator, and an honest, conscientious surgeon and medical practitioner, doing nothing merely for the sake of doing it, but always for a definite object. With the exception of Physick and of Post, the one the leading surgical authority at that time in Philadelphia, and the other in New York, he had no rival as an operator in the country. Mott was then just merging into reputation, full of the promise that was within him, but it was not until after his young, ardent, and accomplished contemporary had been gathered to his fathers, that it reached its culminating point. His immortal operation upon the innominate artery, which convulsed the surgical world, was performed only a few months before Dorsey's death.

Although Dr. Dorsey was educated in the Society of Friends, his religious views gradually underwent a change, and soon after his marriage, probably influenced by the example of his wife, he began to attend the Second Presbyterian Church, then under the joint guardianship of the Rev. Dr. Ashbel Green, afterwards President of Princeton College, and the Rev. Dr. J. J. Janeway, the latter of whom attended him during his last illness, and preached his funeral sermon. His mind was evidently early imbued with religious feelings, and there is no doubt that these feelings exercised a most salutary influence upon his career as a man, a practitioner, a teacher, and a citizen. Shortly before he expired, he observed: "I have a desire to live, and to remain with my family, but my desire to be with Christ is far greater."

The last illness of Dorsey was sudden and violent. On the 2d of November, 1818, he delivered before his class, in the presence of his colleagues and the Trustees of the University of Pennsylvania, an introductory to his course of lectures on

anatomy, abounding, as already seen, in passages of extraordinary beauty and eloquence, uttered with unwonted fervency; and early on the same evening, while the praises which it elicited from his auditors were still resounding from their lips, he was struck down by that disease which was destined to consign him to an untimely grave. The attack was one of typhus fever, and such was its vehemence that it proved fatal in eleven days from its commencement, before Dorsey had attained his thirty-fifth year.

The sad event created much excitement throughout the city, as well as throughout the whole American medical profession. It was regarded as a public calamity that one so young, so promising, and so full of talent and ambition should be cut off in the vigor of his manhood and in the midst of his usefulness. Philadelphia had lost one of her most valued and popular practitioners; and the long train of mourners, as they carried the mortal remains to their last resting-place, attested their appreciation of his worth in heartfelt sobs and sighs, such as the good and the virtuous alone merit and receive when called away from the scenes of their earthly labors.

Dorsey left behind him no riches. Commencing life with hardly any means other than his professional knowledge and his indomitable zeal and industry, he died too early to accumulate wealth or to transmit any munificent estates. A short time before his death he removed to the southwest corner of Walnut and Seventh Streets, on Washington Square, into a house then regarded as one of the most stately and beautiful in the city, furnishing it with great taste and elegance. The Square was not then what it now is, one of Nature's lovely spots, laid out in handsome walks and adorned with majestic trees, the air fragrant and redolent with the song of birds, but an unseemly and deserted common, serving as a Potter's field. Directly opposite, on Sixth Street, stood the old Philadelphia Prison. The house now occupied by Dorsey had been only recently erected, and was literally at the "west end" of the city. He had been in it but a few days when Judge Peters, an old and intimate friend, called to pay him his respects. Standing at the window opposite the Square, he facetiously exclaimed,

"Dorsey, I do not like your situation ; you have a poor prospect beyond the grave."

A lady, possessed of excellent taste and accomplishments, upon being informed that I was engaged in writing a memoir of the life of Dr. Dorsey, whom she had known intimately for several years, kindly sent me the following graphic sketch of his mental and personal attributes : " His character from the outset was one of great promise, and he occupied, at an early age, a high position in his profession. When some one said to Dr. Physick, ' Who can supply your place ? ' he answered, ' You have Dr. Dorsey.' His talents were universally acknowledged, and in addition to his love of science and the duties of his profession, he was a man of great taste, and was fond of pictures, but still more so of poetry, of which he read a great deal and quoted constantly. He was also an excellent chess player. It is not surprising that he should have been so great a favorite with the public, when it is remembered that his tastes were so varied, and that in addition to his abilities, his manners were most polished and courteous. He possessed great vivacity, was most actively kind and polite, and was a charming companion.

" In Lord Brougham's ' Lives of British Statesmen,' he says of Charles James Fox that he was the most thoroughly amiable being he ever knew. In reading this it brought to my mind the character of Dr. Dorsey."

All the intimate male friends of Dorsey have passed away, and the penury of contemporary biography prevents us from offering any further details of his life. Chapman, who was his senior only by five years, and who knew him thoroughly in all his social and public relations, was in daily intercourse with him during the whole of his brief but brilliant career, and pronounced; soon after his death, a glowing eulogy commemorative of his many virtues and manly qualities. It was, however, after all, an empty affair, concealing its subject under the flowers of rhetoric, without affording us a just insight into his personal character.

SAMUEL D. GROSS.

SAMUEL BARD.

1742—1821.

AMONG those who have been conspicuous in the profession of medicine, whose lives should be recorded with especial reference to their value, as examples worthy of imitation by all just entering upon the discharge of its duties and responsibilities, few, probably, may claim a higher place than the subject of the following memoir. Without claiming for Dr. Bard great genius or brilliant talents, without asserting that Nature had bestowed upon him gifts superior to those possessed by many who daily embark in the same pursuits, yet will it, in the course of this narrative, be perceived that, by industry in the study of its several departments, by diligence throughout a large professional career, in the discharge of all his obligations as a practitioner, and by cultivating all the social and Christian virtues, he elevated himself to the very front rank as a medical scholar, a philanthropist, and a citizen. What he attained may, by pursuing a similar course, be the lot of every neophyte. The path which he trod is open to all. The objects for which he successfully contended, encompass all that is most desirable in this life, and secure a fadeless inheritance in the life to come.

The unexceptionable character of the man, the value of the example furnished in the life of Dr. Bard, in his social, religious, and professional intercourse with his medical brethren and with the world, will, it is believed, furnish an adequate apology for the length of the following narrative, and the minuteness of detail in private, social, and other matters, which may not possess interest to the medical practitioner exclusively. Through

a long and blameless life, he was no less conspicuous and useful as a relative, neighbor, and Christian, than assiduous and intelligent in the discharge of the responsible duties of the physician. Believing that the claims of the community and of religion cannot be too strongly urged upon the consideration of medical men, we shall proceed without further preliminary to ask attention to the subject of the following memoir, in the full conviction that before its conclusion every reader will be ready to concede the truth of the predictions already hazarded in relation to his peculiar merits.

The ancestors of Samuel Bard preferring adherence to their faith, rather than submission to the requisitions of an arbitrary decree of the French government, became exiles under the provisions of the revocation of the Edict of Nantes. To the same decree was America indebted for many of the heroes of the Revolution. Among the French refugees in this country may be enumerated the ancestors of Laurens and Jay and Boudoin and Pintard and Boudinot. To this intelligent class of immigrants was she also indebted for much of the spirit of civil and religious freedom, which led to the Declaration of American Independence, and the successful resistance to British oppression and intolerance.

Peter Bard, the paternal grandfather of Samuel, on his arrival in America, established his residence upon the banks of the Delaware, a short distance above Philadelphia. Here he soon after united his fortunes with those of Miss Marmion, the daughter of an English gentleman, who had also abandoned country and home from scruples of conscience and sought their enjoyment in the New World. From this marriage sprung the immediate ancestor of the subject of this sketch, Dr. John Bard, one of the most distinguished practitioners of his times. Dr. John Bard, the friend and companion of Franklin, received his education and commenced the practice of his profession in the city of Philadelphia. Here he became attached to the granddaughter of Peter Falconer, another distinguished French refugee, who had emigrated to New York in the capacity of private secretary to Lord Corn-

bury, governor of the province, and favorite cousin of Queen Anne.

Not long subsequent to this event, upon the first day of April, 1742, Dr. Samuel Bard, the subject of the present memoir, was born, and whilst his father and family were yet residing in Philadelphia. In 1746, however, when his eldest son, Samuel, was but four years old, Dr. John Bard was induced to remove to the city of New York, where he long occupied a prominent position among the medical and literary men of his period.

Soon after his arrival in New York, the education of his son commenced, by placing him at the grammar school of Mr. Smith, who is said to have been a teacher of considerable merit. Of precocity of talent, no evidence appears; but the few anecdotes related of his early years, show the peculiar traits of his character to have been rather a felicity of nature than the tardy fruits of discipline. He was, however, regarded as a quick, industrious, and amiable child; and the instruction given by his observant mother to his master is frequently cited to show her opinion of his capacity. "If Peter," said she, "does not know his lesson, excuse him; if Sam does not, punish him, for he can learn at will."

An anecdote is often related which illustrates the high regard of his father for truth-telling, and the care he took to discipline his child in the path of rectitude, with its effect upon his after life. To screen from punishment a servant-boy of about his own age, who had broken his father's cane, he falsely took the blame upon himself; the deceit being discovered, his father punished his falsehood, whilst he praised his generosity. His narration of this circumstance seventy years after its occurrence, shows the strength and value of such early impressions. The lesson he then received, he transmitted to his children. "Any fault," he used to say, "may be excused but want of truth."

Nor was he less indebted to the tender care and valuable instructions of his mother, who planted early and deep in his mind the seeds of truest wisdom. In a paper of religious

reflections, bearing the date of his seventy-first year, he thus commemorates it: "I thank God for the tender and affectionate care of my mother through the hazards of a sickly infancy, and for having impressed upon my mind, almost from the first dawnings of reason, an early sense of religion."

When about the age of fourteen, his constitution, which from infancy had been feeble, received so severe a shock, by a continued fever, that his father judged it prudent to remove him, for a time, both from the city and his studies. He accordingly passed the ensuing summer at Coldenham, in the family of one of his father's most distinguished friends, Cadwallader Colden, lieutenant-governor of the province. His residence in the country not only restored him to health, but filled his memory with pleasing recollections both of the society and studies to which it introduced him. In this family resided Miss Colden, well known as the correspondent of Linnæus, and in whose honor—or that of her father, as is by some contended—the *Coldenia* bears its name in the Linnæan Catalogue. With this lady, differing in years but united in tastes, young Bard formed an intimate friendship. Under her instructions, he became skilful in botanizing, a pursuit which ever remained with him a favorite amusement, and which owed, perhaps, a part of its attractions to the pleasing associations with which it was originally connected, since to the end of life he never mentioned the name of his instructress without some expression of admiration or attachment. Nor was the obligation unreturned; with a degree of native taste, which through life made him a delicate, if not a critical judge of painting, he had united at this early age much poetical skill, which enabled him to double the value of his companion's botanical researches by perpetuating their transient beauties or peculiarities. The delicate respect paid on the following occasion, excited a feeling of gratitude proportioned rather to his own embarrassment than the importance of the circumstance. The first day of his arrival, Mr. Colden being absent, he was called upon, at the dinner-table, to ask a blessing; through confusion or forgetfulness, he began the Lord's Prayer; he had not proceeded far before

he was sensible of his mistake, and overwhelmed with confusion ; casting, however, a timid glance around, he became reassured by the composed looks of the ladies, his auditors, and so proceeded gravely to its close. To this mistake, they never made the slightest allusion, until the intimacy of friendship justified a smile at his long and unusual grace.

With renovated health, a mind enlarged by new studies, and manners improved by early and constant intercourse with the best society, he returned to New York, to engage in the severe duties of collegiate life.

His father, though deprived of the advantages of early classical education himself, justly regarded the studies of that department, as the broad and firm basis of a refined and liberal education. Young Bard was accordingly placed in the family of Dr. Leonard Cutting, the classical teacher in Columbia College, as private pupil.

Mr. Bard was among the number of those of that school who were distinguished for classical purity, and he always spoke of his accomplished teacher, not only in terms of affection and respect, but as one to whose refined taste and critical acuteness, he owed whatever he himself possessed of either. Industrious by nature, it was here that he laid the foundation of that habit of early rising, which lengthens life, and doubles the powers both of body and mind ; a practice which he ever afterwards continued, and always recommended to the young around him as the greatest source of health, of leisure and enjoyment. Daylight in summer and an hour previous to it in winter, seldom found him in bed, and this practice trained him to habits of strict economy of time, and a vigorous employment of it.

After the completion of his collegiate course, he was led by his own wishes and the choice of his father, to adopt the study of the medical profession. His opening talents were viewed by a partial parent in so strong a light, and so just an estimate did that parent place upon the importance of being fully and thoroughly taught in the several sciences upon which medicine is based, that he determined to educate him abroad. This

plan, though rendered necessary by the difficulty of obtaining able medical instruction in this country at that period, was much more consonant with the inclinations than the pecuniary condition of his excellent father.

The school of Edinburgh was at this time in the highest repute, and was accordingly selected as the great source from which the young pupil was to derive his medical education, and form his character for future life. After much anxious preparation, at the early age of nineteen, young Bard bade adieu to his native country, with a mind stored with such learning as the colonies then afforded, and a heart not untutored by parental instruction.

He embarked in September, 1761, at a period when Great Britain was at war with France; nor did he escape the hazards incident to a sea voyage under such circumstances. The first intelligence which his father received from him, was contained in a letter, dated Bayonne Castle, announcing that in three weeks after leaving New York, he fell into the hands of the enemy, and was now in confinement. It was fortunate for our young prisoner that Dr. Franklin, the intimate friend of his father, then resided in London as agent for several of the colonies. By his kind offices, the gloom of a prison was soon exchanged for the freshness and freedom of the country, and after five months' residence in France, he proceeded on his way to London.

It may not be amiss, brief as this sketch must necessarily be, to introduce in this place a short extract from one of his letters to his father, showing the thoughtful and rigid economy practised whilst only nineteen years of age, and relieved of all the restraining influences of home; and commend the spirit of accountability therein manifested, as an example worthy of imitation by all under similar circumstances. "But although I cannot charge myself with any unnecessary extravagance, except it was purchasing a German flute and employing a teacher, in order to pass my time with some little content in the prison, I have, during my stay in France, together with my expenses on my voyage and journey from Plymouth, spent near

forty pounds sterling. I am afraid you will think this a very extravagant sum; but I do assure you that there was not twenty shillings, except my flute, which I spent unnecessarily." During the whole of his five years' residence abroad, his correspondence with his father and family was full and frequent. His letters bespeak good sense and warm feeling, and never failed to cheer the heart of his fond parents and friends. In a letter from his judicious father, we find the following among other excellent suggestions, relative to the objects deserving his chief attention during his residence abroad, and which were not lost upon the young man to whom they were addressed, and may profitably be placed before all aspiring to the honors and emoluments of the medical profession.

"There are two things in your residence abroad I have much at heart: first, that you should acquire the character of an ingenious and skilful physician; and secondly, that of an easy and well-bred gentleman. The first is to be attained by a close attention upon the duties assigned you by the professors, and a careful investigation of the principles upon which the science you are studying is founded. The other is by a cheerful, affable behavior, to secure the friendship of your teachers and equals, and by relaxing your mind in the company and conversation of the polite part of society, always, as you have heretofore, cultivating an acquaintance with those whose abilities and dispositions will improve, as well as entertain you.

. . . . Above all things, my dear son, suffer not yourself, by any company or example, to depart, either in your conversation or practice, from the highest reverence to God, and your religion: always remembering that a rational and becoming view of these duties is the most likely means of influencing your moral conduct, and is, in truth, the brightest ingredient in a gentleman's character, naturally producing not only that decent, chaste, and polite style, in common conversation, so essentially necessary in one of your profession, but also laying the foundation of a virtuous and honorable life."

Arrived in London, young Bard now entered upon the great object of his visit with that diligence and zeal, which through

life marked his character. His letters of introduction were to the first men of the age, by which he became immediately introduced to Fothergill, Hunter, Smith of St. Thomas's Hospital, Mackenzie, and others. The gentleman under whose peculiar instruction he placed himself, was Dr. Alexander Russell, an able and amiable man, well known by his various communications to the Royal Society, and other writings.

Pursuing his studies here until September, 1762, he left London, and repaired to the great medical school at Edinburgh. Here, as in London, he enjoyed the privilege of associating with characters of the first eminence. At this time, Robertson, the historian, was at the head of the University, and Rutherford, Whytt, the two Monros, father and son, Cullen, Hope, Ferguson, Gregory, and Blair, were among its teachers. Under such men was Bard trained, and at this pile was that torch lighted, which subsequently inflamed many kindred bosoms. Of his teachers he appears to have enjoyed, so far as a young stranger can be supposed to do, the friendship as well as instruction; was received an inmate into the family of Dr. Robertson, and continued to keep up a frequent correspondence with his London instructors, especially Dr. Fothergill.

With Dr. Cullen's lectures he was peculiarly delighted; in matter he styles him, "that accurate professor," and of his manner, he says: "I own, I think nothing can exceed it; being so entertaining as well as instructive, that I could listen to him with pleasure for three hours instead of one." Of Monro's anatomical lectures he speaks highly, and comparing him with Hunter, says: "But for want of opportunities for dissection, I should have no occasion to regret the change from London; but to have a subject in my possession here, would run the risk of banishment, if not of life." The application of his time, as given by himself, affords no weak proof of his industry and firmness of mind. Young and ardent, away from home and surrounded by the temptations of a large metropolis, it affords an honorable example of the conscientious performance of duty, and a lesson, not without its use, to those who may

be similarly circumstanced. "My day in general," says he, "is thus spent: from seven to half after ten, I am at present employed in the mathematics, which will soon, however, be changed for professional reading and the examination of my notes; I then dress, and am by eleven at College, attending Professor Ferguson until twelve; from that hour until one, at the hospital; from one till two, with Dr. Cullen; from two to three, I allow to dinner; from three to four, with Monro in anatomy; from four to five, or half an hour after, I generally spend at my flute, and taking tea, either at a friend's room, or with a friend in my own: after this I retire to my study, and spend from that time until eleven o'clock in connecting my notes, and in general reading. This is the plan I have set down for myself, and am resolved to stick close to it, for the winter at least." "In the summer I shall not be so busy, but have a little time if I do not go to London, to amuse myself with botany and seeing the country; then you shall have as long letters as you please from me, for there is nothing I take more pleasure in than in writing to you, unless it be in hearing from you, for in either of these, especially the last, I cannot help imagining myself conversing with you." "I am very much obliged," he goes on to add, "by the good opinion my New York friends entertain of me, and hope I shall never, by any negligence of mine, disappoint them. If liking a profession be a good omen of proficiency, I can assure you I begin to be most highly delighted with mine; I daily discover so many beauties in it, that I am at a loss which first to investigate; and, were it not for the regular plan I have laid down, I should be bewildered and lost in the labyrinth." To a zeal thus grounded in love, no labors seemed arduous, nor any aims too lofty to be attempted. This is evinced in another letter to his father, in which he suggests, at that early day, the establishment of a medical school in the city of New York; a plan, which, in his riper years, he effected, and to which his gray hairs brought reverence.

It is worthy of remark, in passing, that in his letters he frequently expresses a strong sense of gratitude for his father's

"bounty." Fully appreciating the effort it required in his then straitened circumstances, to furnish the means requisite for his long residence abroad, he thus expresses himself: "I do assure you, sir, I never think of the great expense you are at in my education, without sentiments of the warmest gratitude; at the same time I feel much uneasiness lest it should fall heavily upon you." "I am laying out to the best advantage now, to return it double when we come to a reckoning." The sequel will show that this promise, so generously made, was literally more than fulfilled in after life.

About this time, he achieved his first triumph in scientific attainment, the record of which we give in his own language. "Last week, the judges for the annual medal, given by the professor of botany of this University, examined the *hortus sicus* of the candidates, and I have the pleasure to acquaint you, decided in my favor; in consequence of which determination, the medal is to be publicly given to me sometime in April, by Dr. Hope."

To show the variety of his studies and exercises, in all of which he sustained himself creditably, we copy the following from another letter: "I cannot omit this opportunity of sending you a copy of the papers I read before the medical society this winter; they may perhaps afford you half an hour's entertainment, and let you a little into the nature of that institution, of which I informed you some time ago that I was admitted a member." "In the year 1787, this Society was first organized by Drs. Cullen, Akenside, and some others, who are now at the head of their profession here or in London; and since that time it has had many members, who have become ornaments to society. As it naturally has undergone many changes, and now consists of between twenty and thirty members, who meet every Saturday evening, in a room in the infirmary, where they dispute upon medical subjects in the following manner: each member has, about six months beforehand, a set of papers given him to write a comment upon, consisting of a practical case, a question on some medical point, and an aphorism of Hippocrates. Every Saturday, a set of these papers is pro-

duced and read before the Society by the author, having circulated for a week before among its members, who come prepared with objections, and the author with arguments to defend them. In this exercise of disputation, we spend about four hours to very good purpose, for we are obliged to muster our whole stock of knowledge, to defend opinions, which are never allowed to pass, without being thoroughly examined; and as there are always a number of members, men of real knowledge, we young men are not allowed to be carried away by false reasoning, nor led into erroneous opinions."

The following letter contains gratifying information to his father: "I am at present engaged in a variety of studies; besides my college duties, I have two private tutors who attend me. With one, I spend an hour every day in writing and speaking Latin; with the other, French; and also three hours in the week with a most excellent drawing-master. So many branches, together with reading practical authors, entirely fill up my time, and are attended with considerable expense; but I hope I shall never repent it, and that it will one day be returned to me with interest. I sent you, some time ago, a letter from Dr. Hope; since that the medal has been publicly given to me, and the enclosed paragraph published on the occasion." "I had an opportunity this winter of showing my preparations to Dr. Pultney, a man of eminence in the literary world, and fellow of the Royal Society; he praised them much, and assured me they excelled any in the British Museum. He presented me on going away, with a thesis, with the following compliment on the first page: 'From the author to Mr. Bard, as a small tribute of respect due to his success in cultivating botanical knowledge.'"

In the following letter the father's fond anticipations and the arduous toils of the son are, in a good measure, consummated.

EDINBURGH, May 15th, 1765.

MY DEAR FATHER:—

My work being now over, and my mind at ease, I lay hold of the first opportunity of spending an hour with you, and

communicating to you a little of the satisfaction I myself feel. The day before yesterday, I received my degree, with all the form and ceremony usual upon such occasions. The two Monroes, with Dr. Cullen, were in all my private examinations. My good friend Dr. Hope, publicly impugned my thesis; and to all of them I consider myself much indebted for their behavior on this occasion, in which, although they kept up the strictness of professors, they never lost sight of the politeness of gentlemen."

Dr. Bard described his private instructor as a man "learned and ingenious, but at the same time bold and dogmatic; nor will medical men be inclined to dispute the justice of this description, when it is added that it relates to Dr. John Brown, afterwards so well known as the author of the medical theory which bears his name; a pathology so simple in its principles, and so easy in its application, as to have been liable to great practical abuse.

In the lectures of Dr. Blair, Mr. Bard took great delight; they gratified a naturally delicate and discerning taste, which fitted him to excel in such studies. On one occasion, the ability he displayed in the criticism of a paper submitted to him, drew forth, from the professor, a marked public commendation. In a mind of such a temperament, praise stimulated exertion; and not a little of his subsequent fondness for these studies and ability in them, may be traced to the assiduity with which he then cultivated them. In this art, Dr. Bard was no mean proficient. In after life, he always commanded in public delivery, a degree of attention, which went far beyond the claims of his figure or voice, but which was the result of graceful gesture, correct emphasis, and, above all, the nice discrimination and animated expression of the sense and feeling of that which he delivered. Indeed, Dr. Bard was an orator of no common stamp; he threw his heart into his words, and from the fulness of his own, poured persuasion into the breasts of others.

The letter of recommendation which Dr. Bard received from

the Medical Society, on his departure, has the sign manual of each of its members, among whom may be found the names of some whom kings have since "delighted to honor," and, what is more to their credit, who have themselves done honor to their profession. Among such may be mentioned, Saunders, of London, and Sir Lucas Pepys, physician to George IV; Percival, of Manchester; Professor Duncan, of Edinburgh; Professor Parsons, of Oxford; Haygarth and Watson, of Cambridge; and Professor Morgan, of Philadelphia; names widely scattered, yet indebted perhaps to this early union for the first excitement of that native talent which subsequently rendered them conspicuous.

His inaugural thesis, "*De viribus opii*," which he defended at his examination, has been spoken of with great respect by competent medical men. Having selected, as his subject, the effects of opium on the human system, which, in common with his teachers, he regarded as a stimulant, he instituted a set of experiments to test or rather to verify that opinion.

From the learned Professor John W. Francis, M.D., the Nestor of the New York Faculty, to whom the author is under many obligations for facts and anecdotes contained in this sketch of Dr. Bard, the following remarkable circumstances bearing upon this point are derived. "Such," says Professor Francis, "was his success under Cullen chiefly that he wrote his inaugural, '*De viribus opii*,' for graduation, without guide or assistant. Old Dr. Saunders, who wrote on the liver and on mineral waters, and who, by-the-by, was the first clinical instructor or lecturer, chronologically speaking, that ever London had, told me that those experiments recorded in Bard's essay or dissertation, were made on his own person, as he was fellow-student with Bard at Edinburgh." The experiments were frequently and carefully repeated, and the results accurately noted. His facts being thus obtained, he proceeded with his inductions, and concluded, if not with truth, at least with singular freedom from prejudice, in the opposite opinion from that which he had proposed maintaining. Whether that opinion be right or wrong, the mode of arriving at it was

creditable alike to his candor and his enterprise. It showed him to be a true philosopher, and evinced an openness to conviction and a fairness of mind, which form not only the basis of moral excellence but the corner-stone of true philosophy. This thesis, thus carefully prepared and ably defended, admitted Mr. Bard to his medical degree. His diploma bears date September 6th, 1765, and has the signatures affixed of the two Robertsons, Rutherford, the two Monros, Whytt, Hope, Young, Hamilton, Cumming, Ferguson, Russell, and Blair. With the botanical professor, he was a great favorite. "My good friend Dr. Hope," is his ordinary designation of him; and he justly felt it no small praise to be thus distinguished in botany by the friend of Linnæus. The particular intimacy with Monro, of which Dr. Bard speaks in one of his letters, related to the younger of that name: one whom he resembled much in character, and not less in fate. Four years older than his pupil, Monro died the same number of years before him; both rising to the highest eminence in their profession, and in the medical schools of their respective countries; both retaining, amid the bodily weaknesses of age, all their mental vigor, and each closing his academical career by the delivery of a valedictory discourse in the seventy-seventh year of life, Monro to his medical class, Dr. Bard to the graduates of the college over which he presided.

Among the traits of character which distinguished Bard throughout life, was an insatiable inquisitiveness of mind, which led him, wherever he was or whatever the subject, to investigate carefully everything which came within his reach, whether of art or nature. Minerals, plants, animals, man and his works, were rapidly and by turns the object of his attention. Whatever was rare or beautiful or useful, immediately seized upon his imagination, and afforded matter for curious investigation, or a basis for ingenious theory. Even while engaged in his medical studies, the various branches of arts and manufactures and of agriculture received a share of his inquiry and pursuit.

Having completed his course of medical education, he em-

ployed some time in an excursion through the most interior parts of Scotland, and various parts of England, and the scenes which presented afforded him the highest gratification, to which he often afterwards alluded with the feelings of enthusiastic admiration ; but from some unknown cause, he was disappointed in the execution of his project of a continental tour. A visit to the celebrated University of Leyden he had long contemplated with delight. This interest was doubtless enhanced from the fact that at that period Leyden was considered as the great continental rival to Edinburgh. Boerhaave he venerated, as one of the greatest and best of men, whose character he recommended to the young, as a model for their imitation, and a high and encouraging picture of what virtue and industry can perform. He may even be said to have closed his professional career with his name upon his lips, as the last discourse he delivered to the medical graduates concludes with a forcible delineation of the character of this great man, as the best embodied picture he could give them of the perfection at which they should aim.

Of his last visit to Dr. Fothergill, he told the following anecdote, giving the origin of a maxim which has been since often repeated, and may again answer as a useful hint to the young practitioner. After much salutary advice, suitable to a parting visit, Dr. Fothergill concluded with what he termed the secret of his own success : "I crept," said he, "over the backs of the poor into the pockets of the rich." It would be doing injustice to a character of more than common philanthropy, to interpret this as a recommendation of cold-hearted selfishness ; as such, it was neither intended nor felt ; but as a prudential maxim, which Dr. Bard often himself repeated, and enforced upon young physicians, viz., that the basis of their practice and their fame, to be permanent, should be laid in the opinions of the many, and thus growing up by insensible degrees, it would be free from the dangers that attend on a premature reputation or a narrow and wavering patronage.

After a residence of ten months in the metropolis, making in all an absence of five years from home, he embarked for

New York. The ensuing voyage was long and boisterous ; it, however, terminated safely, and restored him again to his longing and anxious parents. The emotions excited by his first interview are such as can better be conceived than described. To his father, independently of parental affection, this meeting was peculiarly interesting. His favorite plan for his son's education was now completed : a plan which he had pursued under difficulties and embarrassments, with a perseverance proportioned to his anticipation of its success. He was now to judge of its results ; and every parent can imagine with what eager anxiety, under such circumstances, a father would meet a son, and make every word and movement supply deductions either of hope or fear. On which side these preponderated, it is easy to conjecture ; how far they were realized, subsequent events will show. Upon the first evening of his return, he also met his cousin, Mary Bard, a lady highly accomplished and of great personal beauty, then residing in his father's family, who had previously enjoyed his affection, and was soon to consummate his happiness.

The expenses of Dr. Bard's education had exceeded one thousand pounds, a large sum to expend for such a purpose at that early period, and which had involved his father in debt. To relieve his self-sacrificing parent from embarrassment incurred in his behalf, he entered at once upon the exercise of his profession in partnership with him, devoting himself to it with his native enthusiasm and faithful perseverance. For three years, he drew nothing from the profits of their joint business, which amounted to nearly fifteen hundred pounds per annum, beyond his necessary expenses, allowing all the remainder, that he might justly have claimed, to go towards the liquidation of debts which, in honor, he regarded as his own. Considering himself, after that time, as exonerated from all other claim than that of gratitude, he proceeded to form a more tender and more lasting union by fulfilling his engagement with his cousin ; and trusting to Providence and his own exertions, the marriage took place whilst his pecuniary resources did not exceed one hundred pounds. With this lady,

in uninterrupted harmony and affection, he lived through the long and chequered period of fifty-five years: a period exceeding the ordinary duration of human life; and in its joys and sorrows, found her, to use his own expressive language, "a steady, judicious, and affectionate friend, and a dear and excellent wife."

Dr. Bard's early-formed plan of a medical school was not abandoned by him on his return from Europe. Instead, however, of the youthful assistants originally proposed, he succeeded in exciting older and abler men to engage in the task. Within a year after his return, an organization was effected, and united to King's College. His associates in this laudable enterprise were Drs. Clossy, Jones, Middleton, Smith, and Tennant; while to him, then but in his twenty-eighth year, was given, by common consent, what was considered the most responsible and influential department of the Practice of Physic. Thus early did he begin to repay his debt of education to this literary institution, which for forty years he continued to serve, as circumstances demanded, in almost every branch of experimental and medical science, and for the last twenty years of his residence in the city, as Trustee and Dean of the Faculty of Physic. Medical degrees were first conferred by this school in 1769, when a public address was delivered by Dr. Bard, in which he displayed that persuasive eloquence with which he always urged a good cause.

Though not the first lectures which were delivered on medical subjects, it would appear to be the first regularly organized complete faculty for that purpose in America. Upon this point, the following extract from a letter recently received from the venerable Professor Francis would seem conclusive. "Bard is most closely associated with the first medical school of the colonies; for though Philadelphia boasts an origin some two or three years earlier, it was in the New York school, King's College, that the first entire faculty of medicine was created, as that first association, for the first time in this country, established an independent Professor of Obstetrics, thus making for the first time, what is now universal in all the professorships

of the regularly organized schools. Philadelphia did not establish Midwifery as a separate professorship until some thirty years after, when James, about 1810-11, was appointed: Shippen had given Anatomy and a few lectures on Midwifery, from the first foundation of the Philadelphia school until his death."

On the 16th of May, being the day of its annual commencement, Dr. Bard delivered before the officers of the College, and the governor and council of the province, a "Discourse upon the duties of a physician," in which he enforced the usefulness, or rather necessity of a public hospital, and the propriety of its immediate establishment, as the most efficient means of relief to the suffering poor of the city, and of instruction to medical students. So convincing were his arguments, and so well-timed the appeal, that it aroused the individual upon whom it was perhaps most intended to operate. Sir Henry Moore, governor of the province, as soon as the address was closed, expressed warmly both his admiration of the speech, and his patronage of the plan, and immediately headed a subscription with the sum of two hundred pounds. This was followed by proportional liberality by the members of the council, and other gentlemen present, and the sum of eight hundred pounds sterling was on the same day collected. The city authorities made liberal appropriations to the same object, and a suitable structure was erected; but when on the point of completion, the building, whose progress he had watched with so much solicitude, was entirely destroyed by an accidental fire; so that this noble design remained unaccomplished until the year 1791. From the period of its commencement until his retirement, Dr. Bard continued to be one of its visiting physicians, in which he never omitted a single day to perform its onerous and gratuitous duties.

Among other obligations which the profession in New York owe to this same discourse, is the exposure it contains of the unreasonable and dangerous practice which then prevailed, of their charges being grounded solely on the medicine given to their patient; thus unjustly depriving them of any remuneration

for that wherein alone the value of their services consisted : and exposing them to the constant temptation, if not absolute necessity of prescriptions, often needless and sometimes hurtful. This bold expostulation probably tended in no small degree to hasten the change, which, on this point, soon after took place, separating the duties of the physician from those of the apothecary.

In the year 1772, Dr. John Bard, the father, removed to Hyde Park, his native country residence, and his city establishment was purchased by his son, who entered at once into his father's circle of practice, out of the profits of which he continued for five years to allow him a large proportion.

In 1774, Dr. Bard added to his existing duties the labors of a public course of chemical lectures. They were, however, soon interrupted by the all-absorbing topic of the day : the struggle of the colonies with the mother country. In the year 1775, when the sword was about to be unsheathed, and a mighty contest for liberty was about to be decided, Dr. Bard was found, among many other upright and patriotic men, who could not at once shake off their reverence for the obligations under which they had been born, and educated, and prospered ; and the native tenderness of his heart rendered him averse to all acts of violence. Towards the end of the year, he placed his wife and children under his father's roof at Hyde Park, and he himself remained in New York until the great question of peace or war should be decided. Finding, however, all hopes of reconciliation vain, and the torch of discord already lighted, he abandoned the city of New York, previous to the British army taking possession of it, joined his family at Hyde Park, and after various removals took up his residence in New Jersey. In the following year, however, failing in the secular employment in which he had engaged, and learning that his property in New York was wasting during his absence, he came to the resolution of returning to the practice of his profession in that city.

Obtaining permission to return, he found upon his arrival, his house occupied by the enemy, and that it was exceedingly difficult to resume his professional business. The government

viewed him with suspicion, and his former intimates with a prudent coldness. His father's residence within the American lines, and his brother's holding a commission in the Continental army, seemed to justify this caution; while the moderation and candor of his character were, in those days of hostile zeal, misconstrued or unappreciated. He remained a considerable time without a single professional call, and was reduced literally to his last guinea. Walking down Broadway in a melancholy mood, his mind filled with melancholy forebodings, a wife, two sisters, and five children, all dependent upon exertions he had no opportunity to make, he was accosted by a former friend whom he had not before met; this was Mr. Matthews, the mayor of the city, whose well-known loyalty and official standing, placing him above all low suspicion; he not only addressed Dr. Bard with his accustomed cordiality, but immediately, on some slight pretext, requested his professional attendance at his house. His frequent letters to his American friends, had given color to a malicious accusation preferred against him, of maintaining a treasonable correspondence. Indeed, the commandant was just issuing an order for his arrest, when Mr. Matthews entering, heard the name of Dr. Bard; he immediately interfered, claimed him as his friend and family physician, pledged himself for the falsehood of the charge, and calling on Dr. Bard, gave him an opportunity to refute it. To suspicion now succeeded confidence; his talents and professional skill rapidly extended his business and influence. While these qualities gained him business and friends, his scientific character gathered around him a literary circle, with whom, after the labors of the day, he generally passed the evening. The late Bishop Moore, his old friends, Mr. Kempe, Attorney-General, and Lindley Murray, the grammarian, and his new intimates, Dr. Nooth, superintendent of the hospital, and Dr. Michaelis, the son of the learned commentator, were his most frequent and acceptable guests.

The return of peace between countries thus united in language and sentiment, Dr. Bard, in common with all good men, hailed with pleasure; to him, however, it was not without its

anxieties, as the patriotism and honor of his conduct were again to undergo a scrutiny from heated, if not unfriendly, judges. Notwithstanding the advice of many, who urged his removal, he trusted again to the uprightness of his motives, and was not mistaken. His countrymen knew how to distinguish between moderation and indifference; and Washington, "the father of his country," by selecting him as his family physician, marked the opinion he entertained both of his character and medical skill.

A new enemy now assailed his domestic happiness. Out of six children, four perished by a rapid and untimely fate; two were buried in the same grave, one, a child of so much loveliness and promise, as to have called forth, in the anxious mind of its mother, the usual apprehensions of an early death. The disease which thus desolated his family, was the scarlatina in its most virulent form. Children, parents, nurses, and servants were all seized with it; and the delirium which rapidly ensued, added to the horrors of an infection, which already restrained or disabled their friends from giving assistance. Two children were with difficulty snatched from the grave, and recovered by slow degrees. As the mother's care ceased to be necessary, her health and spirits sunk under the greatness of her loss and her exertions; and Dr. Bard was called to forget the feelings of a father in those of the husband. A deep melancholy settled upon her mind, which threatened almost the extinction of reason. Alive only to this great duty, he immediately gave up all attention to business, and, for near a twelvemonth, devoted himself to her recovery with an assiduity and faithfulness which were repaid by success. The pious resignation and edifying devotion displayed under these afflictive dispensations are among the finest traits of character in this excellent man.

In the summer of 1784, Dr. Bard resumed the duties of his profession, in the city of New York, leaving his wife, in better health, at the house of her uncle, in New Jersey. His religious feelings, on the restoration of his wife's health, are expressed with pious gratitude in a prayer found among his papers.

Soon after he was re-established in business, it was found that his father, Dr. John Bard, had suffered losses to such a degree after his retirement, as to induce him to apply to his son for relief from his pecuniary embarrassment. The appeal was not in vain; his son had not forgotten his early debt of gratitude of education, and immediately applied the whole of his accumulations, now amounting to five thousand guineas, to his father's relief, preferring this application of it to the most tempting speculations then opened to capitalists by the sale of confiscated estates. He accordingly relieved his father from his load of debt; and, by his persuasions, induced him to return to the exercise of his profession in New York, in which he continued until the year 1797, when his son's projected removal determined his own, and he retired, for the last time, to close a long and chequered, but cheerful life, in the shades of his early retirement.

Dr. Bard's character having been displayed to some extent in the light of a son and husband, it remains but to show that the duties of a parent were fulfilled by him with equal tenderness and judgment.* Out of ten children, but two had been spared to him; to these, a third was afterwards added, not only the child but the companion and solace of his old age, and to their education he now devoted most of the leisure which busy days and broken nights afforded him. His numerous letters to his children exhibit a pleasing picture of the animated tenderness of his manner. Kind and judicious praise, as his letters indicate, was the medium by which Dr. Bard operated on the minds of his children, and seldom did a father succeed better in awakening a warm and generous enthusiasm to deserve it. In all their early performances, they were sure to receive in his animated commendation a sufficient recompense for their exertions; and the applause which first arose from parental

* To those interested in his domestic history, we would commend the "Life of Dr. Samuel Bard," by Rev. John McVickar, of New York, where will be found many interesting letters, upon the various subjects referred to in this memoir, from himself, his wife, and father, and from several other members of his family.

fondness, became an excitement to what might be truly deserving of it. As they grew older, he became their companion and friend, leading them to unreserved communication of their actions and sentiments, counselling them in the language of affection, and resting all his influence on the attachment and almost veneration which his solicitude for their happiness excited; but with all this fondness, he united perfect candor and plain dealing. This gained their confidence, and ripened, as they grew up, into the most reposing friendship; a bond which advancing years and commerce with the world, instead of weakening, strengthened, by enabling them better to estimate the value of such a friend and adviser.

While the General Government was sitting in New York, President Washington had recourse to Dr. Bard's professional skill in his own case. In a letter to a friend, he says: "The President's complaint continues to amend, so that I have not the least doubt of effecting a perfect and, I hope, a speedy cure. It will give you pleasure to be told that nothing can exceed the kindness and attention I receive from him." On one occasion, being left alone with him, General Washington, looking steadfastly in his face, desired his candid opinion as to the probable termination of the disease, adding, with that placid firmness which marked his address, "Do not flatter me with vain hopes; I am not afraid to die, and therefore can bear the worst." Dr. Bard's reply, whilst it expressed hope, acknowledged his apprehensions. The President replied, "Whether to-night or twenty years hence makes no difference; I know that I am in the hands of a good Providence." Dr. Bard, senior, was subsequently called in consultation, at the suggestion of General Washington, and by the blessing of that "good Providence" in which he trusted, his life was preserved to his country, at a period when it never more needed the counsels of his calm prospective wisdom. The result of this illness was an intimacy with his patient, which Dr. Bard justly felt proud of. It continued unbroken until the removal of the seat of government to Philadelphia, an event which he much lamented for many and obvious reasons.

Temperance, exercise, and early rising had strengthened a weakly constitution, and enabled Dr. Bard to go through a daily course of extraordinary professionable labor. One of his early students thus speaks of a winter residence in his family. "He rose at the earliest hour; at five o'clock he was superintending the studies of his son and myself, and engaged in preparing his public lectures; from breakfast till night I saw no more of him, except in the streets on professional business; then, indeed, himself, his phaeton and servant were to be seen at most hours, both of the day and night."

Into his literary gratifications, Dr. Bard carried all the ardor of his character; he seized upon every new publication of merit, with the avidity of a famished appetite, and during its perusal, was both deaf and blind to all causes of interruption. This absorption of mind was so great in his later years, as sometimes to be made the subject of good-humored experiment; of which he seemed to be unaware, as of everything else that passed around him. On looking into a copy of the "Vicar of Wakefield," when it first came out, he reserved it for evening reading to his family. Commencing it at rather a late hour, his high relish of it would not permit him to lay it down until he finished it; and his hearers not choosing to retire, he closed the volume as the morning sun was rising. In reading Shakspeare he not only delighted but excelled; and his graceful action was in just and harmonious accordance with the sentiment expressed. On questions of a moral or religious nature, where the arguments flow rather from the heart than the head, he was both powerful and persuasive; not indeed in the nice distinctions of schoolmen, but in the energetic enforcement of broad and leading truths. He had here that peculiar tone of eloquence, which arises from full-hearted sincerity, a language that can neither be misunderstood nor counterfeited, and which never can be otherwise than persuasive and commanding.

Of personal courage, Dr. Bard had a great share, but it did not arise from forgetfulness of danger, so much as from disregard to it. His mind was intent on the duty to be performed, and weighed not the risk that attended it. In illustration, an

instance may be mentioned of his conduct in the popular tumult, commonly called "The Doctors' Mob," excited in the year 1788, against the physicians of the city, from suspicion of their robbing the graveyards. In this riot, which for two days set at defiance both the civil and military force of the city, Dr. Bard exhibited a calm and dignified composure, which seemed to awe even the wild passions of the populace. Conscious of his innocence of the alleged charge, he resisted the most urgent solicitations of his friends to flee or conceal himself; but as the infuriated mob approached his house, ordered the doors and windows to be thrown wide open, and paced his hall in full view of them as they drew near. His calmness or his character saved him; they approached with horrible imprecations, gazed a while in silence, and then passed on with acclamations of his innocence.

That this composure was the triumph of mind over body, may be safely inferred from the anxiety and sensibility he evinced, when the sufferings of others were in question. This temperament unfitted him, as it did his favorite teacher, Cullen, and many other eminent physicians, for a calm surgical operator. The first operation he performed, having completed it with a steady hand, he fainted as soon as the wound was dressed and the patient safe. His anxiety of mind was so great on these occasions, that he is known to have passed the entire night before making an important operation without sleep, pacing his chamber, and absorbed in reflections upon the responsibilities involved in its performance. As a physician, this acute sensibility, so far from an impediment, was in no small measure, the ground both of his popularity and success. It stimulated him to greater efforts in storing his mind with the history, symptoms, and location of disease, and increased his vigilance in the application of remedial measures. Being of a hopeful temperament also, whilst it sometimes depressed his feelings, it never lessened his exertions. It gave the warmth of friendship to professional formalities, inspired the patient with confidence in his skill; and, thus giving relief to the mind, paved the way for that of the body. To the friends

of the sick, his manners, or rather his character, was peculiarly comforting,—to the skill of the physician he added the interest of the relative. They were satisfied that everything was done his art could do; that neither coldness, nor selfishness, nor the pursuits of pleasure or ambition, withheld him from any personal exertion. His look, and language, and actions, all spoke the deep interest he took in the result; showed a heart not then set on reputation or profit, but filled with sympathy for human suffering, and alive in all its energies to devise means for its relief. The comparison Dr. Bard once made use of in a case of violent disease, will illustrate this excitement. “I feel,” said he, “as if I had a giant by the throat, and must fight for life.” Of the success of medical practice it is not easy to speak; but there is no doubt that this powerful union of heart and head often produced wonderful recoveries; and the universal attachment of his patients, certainly evinced no common degree of reliance on his professional skill.

In practice, Dr. Bard was guided more by the cautious experience of an observing mind than medical theories. In doubtful cases, he was content to prescribe rather for the symptoms present than the disease, and trusting much to the curative efforts of Nature, was content to consider himself Nature's interpreter and ministering servant; following, not guiding her, and finding his chief employment in removing the obstructions which impeded her wise course to returning health. Whilst he did not undervalue the improvements in modern medical science, he cautions young practitioners against too great readiness in receiving new names, new theories, and new remedies. “New names,” says Dr. Bard, “are always deceiving; new theories are mostly false or useless; and new remedies for a time are dangerous. This rage for novelty pervades our profession, especially in this country. Hence our extended catalogue of new fevers, and hasty adoption of new remedies; hence the unlimited and unwarranted application of mercury without weight, and brandy without measure, and the lancet without discrimination; and hence, I am afraid I may say, the

sacrifice of many lives, which might have been preserved, had they been left to water gruel and good nursing."

With respect to his communicating to his patients a knowledge of their danger, he says: "There is in the human mind a principle of acquiescence in the dispensations of Divine Providence, which, when treated with prudence, seldom fails to reconcile the most timid to their situation. Such information, I have generally found rather to calm perturbation of mind, than to increase danger or hasten the event of the disease. Whenever, therefore, the duties of piety, or even the temporal interests of friends have demanded it, I have not hesitated making, and seldom or never repented such communication."

Having accumulated, by his own industry, the sum of fifteen hundred guineas, he sent it to England to be invested in the British funds; the banker in whose hands the funds were deposited failed, and it became to him a total loss. Whilst reading a letter announcing this fact, his wife observed him to change countenance, and anxiously inquired its contents: "We are ruined," said he, "that is all." "If that be all," rejoined his calmer companion, "never mind the loss, we will soon make it up again." Such a spirit was contagious; Dr. Bard took courage from the example of his wife, and returned to the task with cheerful resolution. The necessities of his father three times absorbed all his means, and involved him in debt; but the same resolute and prudent management as often freed him, and eventually secured for their declining age that happy medium of wealth which the wise have ever preferred, as affording the greatest enjoyments with the fewest cares; and which so fully answered all their desires, that they retired to the quiet of the country at a time when the extent of his practice, and the rising charges of the profession, would have doubled his fortune in the space of a very few years.

Of Dr. Bard's time and services, most of the literary and benevolent institutions of the city had a share. To the Hospital, he continued devotedly attached. Of the City Dispensary, he was one of the founders and physicians; of the Agricultural Society of the State, an original and active member.

His exertions contributed to the formation of the first public library; and, in short, his heart and hand were with every scheme of benevolence and public improvement.

In the year 1791, the trustees of Columbia College, with the co-operation of the Medical Society, reorganized the department of medicine, which the war of the Revolution had broken up, at the head of which, as Dean of the Faculty, was placed Dr. Bard, who, anxious to contribute his personal exertions to the advancement of medical education, gave to the students in the wards of the hospital a course of clinical lectures. At the bedside of the patient, Dr. Bard exhibited the finest model for imitation, as teaching not merely the learning but the manners of a physician. His kindness, his patience, his minute examination and inquiries, his cheering words of consolation addressed to the poorest and meanest, had the value of moral as well as medical instruction, impressing the minds of the students with a conscientious sense of the responsibility of life and health which rested upon them. "Avoid," he used to say, "that affectation of quick discernment and hurried practice which generally marks the ignorant and ostentatious; hurrying from patient to patient, without once reflecting on the misery and mischief they may occasion, and that life, thus trifled away, will one day be required at their hands." In one of his sketches of the good physician, he says, "The physician who confines his attention to the body knows not the extent of his art; if he know not how to soothe the irritation of a troubled and enfeebled mind, to calm the fretfulness of impatience, to rouse the courage of the timid, and even to quiet the compunctions of an over-tender conscience, he will very much confine the efficacy of his prescriptions; and these he cannot do without he gain the confidence, esteem, and even the love of his patients."

As a relaxation from business, Dr. Bard peculiarly prized the enjoyment of his garden and conservatory, which were stored with the choicest native and exotic plants. The pleasure he took in them was almost a peculiar sense; nor was it to him, as he asserted, without its moral uses. He was often

known to say, that nothing calmed and soothed his mind like a walk among his plants and flowers; and that he used it as a specific against the petty cares and anxieties of life.

The period was now approaching in which Dr. Bard thought that, consistently with duty and prudence, he might gratify his peculiar taste for the beauties of Nature, might retire to the bosom of his family, and the enjoyment of those quiet pleasures to which he had always been attached. He thought, too, that some pause for reflection should intervene between the business of life and its close; and he resolved to carry into effect a plan which many wise men propose, but few execute,—that of retiring voluntarily from the bustle of life. To this plan, many objections were started and warmly urged by his friends. To the calculations of interest, he replied that he had enough; to the predictions of after repentance, he was content to answer that he was not afraid to try; but against the solicitations of friendship, he found it difficult to maintain his resolution. His father's removal, and his daughter's settlement at Hyde Park, at length decided him; and, in the spring of 1798, he removed to his well-known seat, within a short distance of his father's residence.

During a temporary visit he made the year previous, in which his only son accompanied him, a sudden and violent illness reduced both his son and grandson to the brink of the grave. To watch over the declining age of a father who so tenderly loved him was a consolation not long spared him after this removal to his vicinity. His father survived but two years, and then suddenly sunk full of years, but free from the infirmities of age; retaining, to the very last, that indescribable charm of manners and conversation which attached to him both young and old, and enlivened every society with a continued flow of cheerful and unaffected good humor. These two years, though quickly passed, were long and gratefully remembered by his son. Upon his father's character, he loved to expatiate; while the firm health, the cheerful mind, and the many blessings which cheered the close of his life, were a subject to him of frequent thankfulness.

For some time previous to Dr. Bard's removal from the city, an intimacy had subsisted between him and Dr. David Hosack; and as soon as his removal was decided upon, he took him into partnership, partly with a view to his own relief at a period of much exertion, but principally that he might introduce to his large circle of patients, one to whose medical skill he was content to transfer their safety. Under this agreement he was enabled to pay frequent visits to his new establishment, where he was engaged in extensive building, and at length, in the spring of 1798, to bid adieu to the city. This farewell, however, was neither a final nor a long one. The fearful epidemic, which had before desolated the city, again, in that year, made its appearance, and Dr. Bard resolved not to abandon his post when about to become one of anxiety and danger. His fearless exposure of himself whenever benevolence called him, during that season of flight and alarm, was the means of rescuing many poor deserted wretches from death, and still oftener, of bestowing upon them some comfort and consolation when relief was hopeless. But the aid he so liberally gave others he soon needed himself; being seized with the prevailing fever, his life was with difficulty saved by the kind attentions of his medical brethren, and especially by the affectionate watchfulness, nursing, and care of his devoted wife.

After his restoration, Dr. Bard removed to Hyde Park, and during the remainder of his life made the country his permanent residence; diversified, however, by occasional visits to town for the discharge of duties still devolving upon him, and for social enjoyment with the many attached friends which he had left behind. In many of these he supplied the absence of his friend and former partner from the city; returning, with professional fondness, to the toils and excitement of an extensive practice.

The attractions of retirement from busy life are proverbially illusive; and, perhaps, no nicer test can be found of mental vigor, than the ability to bear the change from necessary to voluntary occupation. Few men could stand this test so well as Dr. Bard; the untired curiosity of his mind found a new

and boundless range in the objects and employments of the country. His poetic enjoyments of the beauties of Nature, his taste in planning and fondness for effecting improvements, his love of experiments and skill in directing them, his desire of knowledge of whatever kind and eagerness in acquiring it, his early and active habits, and, above all, the enthusiasm which stimulated and supported him in all his undertakings, set him above the power of indolence, that "master vice," as Burke terms it, of our nature, and secured to him, to the very last week of his life, all his energy, activity, and cheerfulness. It would not seem easy to crowd into life more sources of enjoyment than filled the twenty-three years of retirement, which adorned and dignified, as well as terminated his life. All the descendants of his father were by degrees drawn around him; his own children successively settled in life, and gathered into the circle; his grandchildren grew up upon his knees, and as he looked around upon the health, and prosperity, and promise with which he was surrounded, he looked, and felt, and spoke, like a patriarch of a better age. But this is anticipating the picture of a later period.

Soon after Dr. Bard became a resident of the country, his zeal in agricultural pursuits led him to unite in the formation of a county society of that nature, over which he was called to preside; a tribute due not only to his scientific knowledge, but to the ardor with which he applied it to useful purposes. To this society, on its succeeding anniversaries, he addressed several discourses, which evinced a union of much practical skill in farming with enlightened theory; and anticipated, in some degree, the course of Sir Humphrey Davy, in applying the powers of chemistry to elucidate the principles and improve the practice of husbandry. A comparison of the virtues of different soils and manures, together with the means of forming them; the introduction of improved implements and foreign grasses, now became to him a never-failing source of occupation and interest, seldom of profit, generally of expense; since, like most other experimentalists, his unsuccessful trials formed by far the greater proportion. To the public, however, they

had their value; his failures taught caution as well as his success wisdom; and, on the whole, diffused much new knowledge among practical farmers, exciting a spirit of rational inquiry into the means of improving the most neglected, though the most useful of arts.

At a later period, when his friends, Chancellor Livingston and Colonel Humphreys, introduced into the county the merino breed of sheep, Dr. Bard entered, with more zeal perhaps than prudence, into that speculation. One danger attending their introduction, Dr. Bard early perceived and labored to obviate. Finding them liable to many new and fatal diseases, the nature and cure of these became a matter of the first importance, both to save the individuals and prevent infection. With this view, he published a work called "The Shepherd's Guide," which, though small, was the result of much investigation, and repeated and careful experiment.

With all the scrupulousness of a moralist, Dr. Bard considered his medical skill as a talent committed by Providence to his charge, and one which he was bound to use diligently and conscientiously. These feelings prevented complete retirement from professional duties, and made him alive to every call of sickness in his neighborhood; especially where poverty precluded remuneration, or the case demanded experience beyond that of the resident physician. On these occasions, he would break off from any occupation, however engaging, and run almost any personal risk, rather than fail in his daily visit; and it was a moral lesson, which sometimes put to shame younger men, to witness such sensibility to duty, and such vigor in its performance, in one whose age and services might so well have pleaded an apology for indulgence. At such calls, he would often shake off indisposition that was confining him to his chamber, and throwing his cloak around him, mount his horse or chair, be for an hour the active and vigorous physician, and then return to the quiet and repose which his health required. "His patient's health," he was wont to say, he "considered as committed to his keeping; his own as in the hands of Providence."

In compliment to his age and character, he was immediately, on his settlement in the county of Dutchess, elected President of its Medical Society, in which station he labored to advance the interests of the profession by increased strictness in examinations for license, and by various schemes for its improvement.

It is, perhaps, to be regretted that Dr. Bard did not turn his attention more to public authorship. The clearness of his mental perceptions, the inductive character of his reasoning, and the manly vigor of his style, would have added much to his own celebrity, and somewhat, no doubt, to the advancement of science; while the warm tone of religious earnestness which pervades all his writings would have given them additional value, and served to wipe out from the character of his profession that base stain of irreligion which has too long and too unjustly rested upon it. Upon this subject, he thus expresses himself, in one of his academical charges: "Galen is said to have been converted from Atheism by the contemplation of a human skeleton; how, then, is it possible that a modern physician can be an infidel!—one who is acquainted with the mechanism of the eye and the ear; with the circulation of the blood; the process of nourishment, waste, and repair, and all the countless wonders of the animal economy! He must be blind indeed if he do not see in these the unquestionable marks of infinite wisdom, power, and goodness."

Besides the works already mentioned, Dr. Bard's publications consist of a treatise, written in the year 1771, upon "*Angina suffocativa*," a disease which then appeared in the city, under a new form or with new virulence; another upon "The use of Cold in Hemorrhage;" many occasional addresses to public bodies; anniversary discourses to medical students; and the largest of his works, "A Treatise on Obstetrics," which was prepared by him after his retirement. This is a work of superior value, if not merit, from the salutary caution which it teaches in the use of those instruments, which, in rash and unskilful hands, have rendered this part of the art rather a curse than a blessing. It inculcates the necessity of a more

frequent resort to the safer instruments, the forceps, and lessening the frequency with which practitioners are in the habit of using the more deadly instruments, the perforator and hooks.

Dr. Bard's literary habits were a model for literary men. His early hours, and active employment of them; his great temperance, and habitual exercise, are habits which would go far, if adopted, in preserving the race of authors from those mental diseases which have become their proverbial inheritance, and which arise much more from indolence of body, or imprudent exertion of mind, than from that superior delicacy of temperament, to which they are willing to impute them. These habits saved him, though possessed of a nervous temperament, in a great degree from the most melancholy accompaniment of age, and prevented that gloom which too often darkens the close of life; and in his domestic letters are to be found pleasing evidences of a cheerful, virtuous, and happy old age.

Another marked trait of his intellectual character has been already mentioned,—his unsated desire of knowledge. He never rested in his acquisitions; and even in his latest years, would undertake some new study with all the ardor of youth. It was one of his maxims that at no period of a man's life should he leave off employing his mind in the acquisition of useful knowledge; he ought always to have some study before him, and that not only as affording him a rational employment in old age, but as a means of keeping the faculties of his mind alive and vigorous. "We fail them," he used to say, "a great deal more than they fail us."

In 1818, when a separation took place between Columbia College and its Medical School, upon the remodelling of the latter, Dr. Bard became the President of the College of Physicians and Surgeons. This honorable station he continued to hold during life, and rendered his official duties valuable to the institution by the warm-hearted interest he took in its success, the judicious plans he framed for its improvement, and the impressive discourses with which he accompanied the delivery of

its degrees. In these, he drew, with his accustomed energy, a vivid picture of the accomplished physician,—in his education, in his subsequent improvement, in his professional conduct, and in his private deportment. Over all these sketches, he threw a moral and religious coloring, which gave them richness and force; showing the happy influence which pure morals and firm religious principles must ever exercise over professional success: and concluding one of his last, as already noticed, with the character of Boerhaave, as approaching to this rare union of the physician, the scholar, the gentleman, and the Christian.

In the flowers and fruits of his garden, he became a learned and skilful horticulturist,—conversed, read, and wrote upon the subject; laid exactions on all his friends who could aid him in obtaining what was rare, beautiful, or excellent in its kind; drew from England its smaller fruits, the larger ones from France, melons from Italy, and vines from Madeira,—managing them all with a varied yet experimental skill, which baffled the comprehension of minds of slower perception. These plans, though novel, were in general judicious, being the result of much reading and long experience, and, above all, of an imagination trained to what Bacon terms “tentative experiments.” In the construction of a conservatory, he displayed much of this talent, it being the first, in that northern climate, which substituted, with success, the heat of fermentation for the more expensive and dangerous one of combustion. In this, during the severity of the winter, he would often pass the greater part of the day engaged in his usual occupations of reading and writing or his favorite amusement of chess, and welcoming his friends who called upon him, to use his own sportive language, to the “little tropical region of his own creation.”

At the same time, Dr. Bard discharged his whole duty as a Christian and a churchman, though occupied by the various pursuits already enumerated. In the year 1811, circumstances favoring its establishment, the Church of St. James, at Hyde Park, was erected, of which Dr. Bard was in effect the founder.

Attached not only by habit, but by rational conviction, to the Episcopal branch of the Protestant Church, he had long been anxious for its establishment in his neighborhood. So highly did he value the public exercises of devotion as means both of instruction and conviction, that, after the erection of the church, in order to supply the occasional absence of its rector, he submitted to the necessity, at the age of seventy years, of receiving from Episcopal authority, the license required to entitle him to act as lay reader in the church.

In one devotional habit Dr. Bard resembled Boerhaave; and perhaps was guided by his example. He regularly devoted a part of his early morning to religious reading and reflection; by which, as he himself expressed it, he endeavored to "set his mind to a right edge for the business of the day." In the church which he contributed so largely to erect, Dr. Bard continued to find, to the very close of life, a more than ordinary comfort and satisfaction. "No equal expenditure of money," he was used to say, "had ever returned to him so large an interest;" and by those who ever saw him engaged in its services, its truth will not be doubted. His venerable looks, his devout but animated manner, his loud response, and eye glistening with gratitude and thankfulness, surrounded by children and grandchildren, form a picture on which memory loves to dwell. From these meetings, sanctified alike by devotion and family affection, he was rarely absent. Sickness could hardly detain him; and absence from home he always felt as a misfortune.

In the education of his children and grandchildren Dr. Bard took a lively interest, personally superintending many of their studies. His eldest grandson, having determined on medicine as his profession, renewed all the ardor of his grandfather's mind, to prepare him for and advance him in it. He became not only his instructor, but his companion in all his medical pursuits; aided him in the arrangement of his laboratory, led the way in experiment, and ran over the whole circle of his former studies with equal enthusiasm, and greater pleasure, as it was now connected with the improvement of one endeared to

him by the ties of kindred; and the display of such traits of character as promised fully to repay his exertions. To his daughter in the study of botany, he performed the same kind offices,—gathering plants and making drawings, with all the ardor and zeal of youth. These circumstances are illustrative of the position that the powers of usefulness are not necessarily lost with age; that feebleness of mind is rather the rust of indolence than the decay of nature; and that old age may continue to the very latest period, honored and beloved: if, instead of driving away the young by austerity, it will teach them by its experience, instruct them with its learning, and turn into love and veneration those natural feelings of respect with which it is regarded.

He was alike the counsellor and companion, the instructor and the friend, of all the young persons who were so fortunate as to have a claim upon his attentions. His plans for their improvement were novel and varied, his pursuit of them eager, his commendation warm and animated, and his reproof, though tender, “vehement in love.” The correspondence which, under these circumstances, he maintained with his grandson, while pursuing his medical studies, abounds in lessons of practical wisdom, and contains the result of his medical experience upon most of the subjects which, during its continuance, attracted public or professional attention.

In passing through Princeton at the period of its public commencement, Dr. Bard received a mark of the high respect in which his character was held, by being waited upon by a deputation from the Trustees of that institution, and to confer upon him the honorary degree of LL. D.

The following letter of religious reflections was found in his desk after his decease:

“April 2d, 1813.

“Yesterday I entered my seventy-first year; and when I review my past life, I find through the whole course of it, reason only for gratitude for an almost uninterrupted succession of blessings. For the liberality, almost beyond his means,

with which my kind and generous father conducted my education ; for his watchful care through the dangerous period of my youth ; for the excellent example of his just, honorable, useful, and benevolent life ; for his early introduction into the business of my profession ; and for the invariable and affectionate friendship with which he treated me unto the day of his death. For the many kind friends who took me by the hand in my first setting out in life, and for that success in my profession, by which I have all along been comfortably supported, and enabled to lay by sufficient for an easy and independent old age. For the many virtues and most useful talents of my dear and excellent wife ; for the good order, neatness, and liberal economy, with which she has always conducted my family ; for the steady, judicious, and affectionate care, with which she has assisted me in the education of our children, and to which, I firmly believe, we are in a great measure indebted for the happiness we now enjoy in their society ; for her courage and support during domestic afflictions, professional vexations, pecuniary losses, and other difficulties I have met with ; for the constant love and fidelity with which she has blest me in health ; and for the patience with which she has endured my fretfulness, and the tenderness with which she has almost annihilated the pains of sickness. For the virtues and affectionate gratitude, the health and prosperity of the children with which God has blest my old age ; for the kind attention of the excellent wife He has given my son, by whom we are enabled to enjoy our present easy and tranquil life ; for the virtuous character and kind and affectionate temper of the husbands He has given to our daughters, by which we enjoy the unspeakable happiness of seeing them happy, and being assured that whenever it shall please God to take us from them, we shall leave them under affectionate and tender protectors. For the pleasing prattle and promising virtues of all our grandchildren ; for the society and affectionate friendship of my sisters and brother-in-law, and for the hopes and promise of their children ; and lastly, for having, by His most gracious and singular providence, now in the evening

of my days, brightened my setting sun by collecting all these blessings around me.

"Give me grace, O Heavenly Father, constantly to acknowledge, in all these blessings, thy most merciful goodness; to feel my own demerits; to repent sincerely of the ingratitude of my past life; and to dedicate the future to thy service, in promoting, to the utmost of my power, the temporal and eternal happiness of my family, friends, and neighbors, and all others within the reach of my influence. Continue thy most gracious protection and blessing to me and my dear wife during the residue of our lives; sustain us in death, and finally pardon and accept us, for the sake and merits of thy son, Jesus Christ, our Lord and Saviour."

Being severely afflicted by the death of a young but favorite grandson, his correspondence relating to the subject contains the following sentiments and instructive reflections: "It is a hard lesson, and one I cannot believe required of us, to receive pain and sorrow at our Father's hand with the same feelings we do joy and blessing,—submit without murmuring we can, and even acknowledge the goodness and mercy of the hand which chastises us, yet we cannot but feel the stripes; and, indeed, if we did not, they would be no chastisement. Still, I yield him up, with the composure of Christian resignation, to the will of our merciful Father, who not only knows, but determines what is best for those who put their trust in him. Misfortune, properly improved, becomes the source of our greatest blessings. If it serve to moderate our desires, at the same time that it rouses us to greater exertion; if it control our unruly passions, and strengthen our virtuous inclinations; above all, if it excite in our hearts true religion, and confirm our humble dependence upon the mercy and goodness of God, then we may say, with truth, it is good for us that we have been afflicted. Whenever I pursue this train of thought, I gain strength, and become ashamed and repentant that I suffer the comparatively slight reverses which we have met with for a moment to damp me. I buckle on my armor, and prepare for the conflict with renewed vigor and fresh hopes. Something

like despondency, I confess, will now and then assail me; and, in spite of my better convictions, the prospect of difficulties, now when my strength begins to fail me, brings a load upon my spirits which I find it difficult to shake off; until again an appeal to that Good Being who has so long conducted me forward, in a prosperous and happy career, calms my troubled mind, and again I feel able to submit to whatever his wisdom may direct."

Having attended the venerable physician and Christian through his long career and honorable life, we come to notice its conclusion in the ripeness of its age, and in the fulness of its powers.

In the month of May, 1821, while preparing for their annual spring visit to the city, and after having passed a winter of more than usual enjoyment, Mrs. Bard was attacked with a pleuritic affection, which, after a few days, gave evidence of a fatal termination. Dr. Bard, though laboring under a similar attack, would not be separated from her, but continued, as formerly, her companion, nurse, and physician. Such a long and affectionate union as theirs had been, had early excited the wish, the prayer, and the expectation, that in death they were not to be divided. What was thus both wished for and expected had become, it seems, the subject of their sleeping thoughts; and a remarkable dream of Mrs. Bard's, to this effect, was now remembered, and repeated by her husband with feelings not of superstitious but pleasing anticipations.

The last effort of his pen was to give comfort to those who were absent. On Sunday, 20th instant, three days before his own death, he wrote, with a trembling hand, a consolatory letter to his friends in New York, who were anxiously awaiting his arrival. This letter, which conveyed to his daughter the first intimation of danger, brought her to her paternal home a few hours too late to receive a mother's blessing; but in time to spend a few short ones of affectionate intercourse with her dying father. It was passed in calmness by both; indeed there was no room for sorrow in such a tranquil, peaceful departure. His calm, but affectionate inquiries about absent friends,

his rational directions as to future arrangement from all perturbation of spirit, were a common conception of departing humanity. could not realize it,—there were in it no in which imagination might draw her pattern.

Under these circumstances, not of composure, he sunk to rest, at five o'clock, the 24th of May, in the eightieth year, hours after the death of his wife!—and their remains.

It is scarcely necessary to state, that New York Hospital and other public institutions, connected, manifested their appreciation, had sustained, and their respect for him, by passing resolutions suitable to the occasion.

It is proper to add, in conclusion, that a great measure, an abridged narrative of his life, "by the Rev. John McVickar, D.D., Philosophy and Rhetoric, in Class of 1822, and to which the author has added a full and complete biography, is now being prepared.

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EPHRAIM McDOWELL.

1771—1830.

DR. McDOWELL was born in Rockbridge County, Virginia, on the 11th of November, 1771. His father, Mr. Samuel McDowell, was for many years a member of the Legislature of that State, and appears to have been a man of great popularity in his district. In 1782, he was appointed, along with Mr. Caleb Wallace, and Dr. Flemming, by the Legislature of Virginia, a commissioner to settle the land-claims of the territory of Kentucky, and entered immediately afterwards upon the discharge of the duties of his onerous and responsible office.

The following year he removed with his family to Kentucky, and settled near Danville, where he lived till the time of his death in August, 1817. During his residence here he was appointed judge of the District Court of Kentucky, and, along with his associates, Judge Wallace and Judge Müter, assisted in organizing the first court at Danville, which was also the first court ever formed in the district or territory of Kentucky. He remained upon the Bench until within a few years of his death.

In January, 1755, Judge McDowell married Miss McClung, of Virginia. The result of this union was twelve children, of whom Ephraim, the subject of this sketch, was the ninth, and the only survivor of whom is Colonel Joseph McDowell, of Danville.

When scarcely two years of age, Ephraim McDowell was brought by his parents to Kentucky. It is not known when he began to go to school; but we are told that he was educated

by two gentlemen of the name of Worley and James, who conducted a classical seminary, first at Georgetown, and afterwards at Bardstown. What proficiency he made under the tuition of these teachers, or how long he remained under their charge, I am not informed. The probability, however, is that he never made any great progress in his classical studies, although it would seem that he had some fondness for them. The few brief articles which he contributed to the medical journals, after he had attained to professional eminence, clearly indicate that his early education was defective.

Soon after leaving school, he entered upon the study of medicine, his preceptor being Dr. Humphreys, of Staunton, Virginia, a graduate of the University of Edinburgh. With him he read from two to three years, when, without having, so far as I can learn, attended any lectures in Philadelphia, at that period the only seat of medical education in the United States, he went to Scotland, to avail himself of the facilities afforded by the celebrated school at the capital of that country. He was a member of the medical classes of the University of Edinburgh, for the sessions of 1793 and 1794. This institution was at that time at the very zenith of its renown, attracting pupils from all parts of the civilized world, and overshadowing every other medical school in Europe. We may well imagine with what interest and delight the young and ardent Kentuckian, thirsting after knowledge, drank in the waters of science as they gushed forth from the eloquent lips of a Gregory, a Black, and a Monro, men whose fame was upon the tongue of every medical student and physician in Europe and America. We may suppose, too, that, amid the novel scenes which surrounded him, his mind often reverted to his native country, lamenting its deficiencies for the acquisition of a sound medical education, and regretting, perhaps in bitter terms, the time which he had spent, to so little purpose, in the office of his Staunton preceptor. We may imagine, moreover, that one just fresh from the wilds of America must have felt no little restraint, and even embarrassment, in the polished and refined circle of students in the modern Athens. His

principal friend and companion, during his attendance upon the Edinburgh school, was Dr. Samuel Brown, afterwards the elegant and accomplished Professor of the Theory and Practice of Medicine in Transylvania University, and brother of the Hon. James Brown, Minister at the Court of France. Of his mode of living and his habits of study, while at this far-famed institution, unfortunately nothing is known. His nephew, Dr. William A. McDowell, who was intimately acquainted with his whole history, states that the surgical lectures at the University were not satisfactory to him, and that, in consequence, in his second year he took a ticket to the private course of the celebrated Mr. John Bell. I am not certain who delivered the surgical lectures at that period in the University; probably they were given jointly by Dr. Monro, the second, and Dr. Russell, the latter of whom was always regarded as a very dull teacher by his classes; while the former, although more sprightly and animated, was very prosy in comparison with John Bell, whose enthusiasm and ardor were absolutely boundless.

It is difficult to conceive, at this distant day, the charm which this great teacher infused into his subject, and the ambition which he inspired in his pupils. All loved him; many worshipped him; not a few idolized him. Among the latter was the subject of this memoir. During his attendance upon his prelections, the young American was enraptured by the eloquence of his teacher, and the lessons which he imbibed, while thus occupied, were not lost upon him after his return to his native country. Mr. Bell is said to have dwelt with peculiar force and pathos upon the organic diseases of the ovaries, speaking of their hopeless character, when left to themselves, and of the possibility, nay practicability, of removing them by operation. The instruction thus given made a powerful impression upon Dr. McDowell, which, as has been already stated, was not lost upon him after he took leave of the academic groves of Edinburgh.

I am not able to say, from the facts before me, whether Dr. McDowell was graduated at Edinburgh or not. His brother,

Col. McDowell, states that he was, and in this opinion he is joined by his son, as well as by his nephew, Dr. William A. McDowell. My belief that he did not take a degree in Scotland, is based upon three facts: first, that no diploma of the kind has been found among his papers; secondly, that Dr. Samuel Brown, his classmate at Edinburgh, solicited him, after he had attained to eminence in his profession, to permit him and his friends to draw up an account of his cases of ovariectomy, in Latin, in order that it might be sent to Edinburgh, to secure him a degree; and thirdly, that in 1825, the University of Maryland conferred upon him the honorary degree of Doctor of Medicine: a circumstance which would hardly have happened had he been a regular graduate. Be this as it may, the fact that he was or was not a graduate, ought not, in the slightest manner, to derogate from his character as a professional man, especially when it is recollected how much more difficult it was then than it is now to obtain a degree in medical schools.

After a residence abroad of about two years, during which he stored his mind with a large amount of valuable information, Dr. McDowell returned to Kentucky, in 1795, and settled at Danville, the scene of his future labors. He immediately entered upon his professional career, nor was he slow in acquiring business. The fame of his foreign tour had preceded him, and served to introduce him into practice. It was known that he had been a student of John Bell, one of the most celebrated surgeons of the age, and that he had devoted himself, with special assiduity, to the study of anatomy and surgery, during his sojourn in Scotland. The consequence was that patients soon flocked to him, at first, from the neighborhood, and subsequently from all parts of the Southwest, for his aid and advice. Those who were unable, on account of the peculiarity of their ailments, or the roughness of the roads, to come to him, he visited at their own homes, often remaining with them several days, or, when the case was unusually urgent, even a week or two. All the important operations that were required for hundreds of miles around, were per-

formed, for a number of years, exclusively by him. At that time he was almost the sole occupant of the field of surgery in the West. Dr. Dudley, since so celebrated for his surgical exploits, had not yet commenced his professional studies, and none of the larger towns of Kentucky had any surgeons of distinction, or even ordinary capacity. The only exception, probably, to this statement, was Bardstown, the residence of Dr. Brashear, who, early in the present century, performed the first successful amputation at the hip-joint in the United States, and who enjoyed for some time considerable reputation as an operator in Nelson and the adjacent counties. Dr. Brashear, however, was scarcely a competitor of Dr. McDowell, or if he was at any time, he did not long continue to be; for soon after the achievement above alluded to, and while he was still a very young man, he abandoned his profession, and moved to Louisiana, where he engaged in planting, even then a lucrative and respectable pursuit. Cincinnati, too, was at that time, and, indeed, for a long period afterwards, without a surgeon of any respectability or eminence. Thus, as I have already stated, Dr. McDowell was, for a number of years, in the undisputed possession of the surgical field, not only of Kentucky, but of the entire Southwest. How well he cultivated this field, what honor he conferred upon his adopted State and upon the country generally, is too well known to require any comment in this place.

In 1802, in the thirty-first year of his age, Dr. McDowell married Sarah Shelby, a young lady of great personal beauty and excellence, daughter of Gov. Shelby, one of the most distinguished citizens of Kentucky. The result of this alliance, which greatly augmented his happiness, was eight children, only three of whom survive. Mrs. McDowell died at Danville only about ten years ago.

Dr. McDowell had practised medicine and surgery for fourteen years, and had secured for himself a large share of reputation for his bold and successful exploits, when, in the autumn of 1809, he was consulted by Mrs. Crawford, the subject of a large ovarian tumor, whose case, from its novelty and the atten-

dant circumstances, must forever remain memorable in the annals of our profession. After a most thorough and critical examination, Dr. McDowell informed his patient, a woman of unusual courage and strength of mind, that the only chance for her relief was excision of the diseased mass. He explained to her, with great clearness and fidelity, the nature and hazard of the operation; he told her that he had never performed it, but that he was ready, if she were willing, to undertake it, and to risk his reputation upon the issue, adding that it was an experiment, but an experiment well worthy of trial. Mrs. Crawford listened to the surgeon with great patience and coolness, and at the close of the interview, promptly assured him that she was not only willing, but ready to submit to his decision; asserting that any mode of death, suicide excepted, was preferable to the ceaseless agony which she was enduring, and that she would hazard anything that held out even the most remote prospect of relief. The result has been long before the profession. Mrs. Crawford submitted to the operation, and thus became the first subject of ovariectomy, of whom we have any knowledge.

It has already been seen that Dr. McDowell, during his residence at Edinburgh, attended the surgical lectures of Mr. John Bell, who took especial pains to direct the attention of his pupils to the diseases of the ovaries. It is not improbable that the young Kentuckian, while listening to the teaching of the ardent and enthusiastic Scotchman, determined in his own mind to extirpate these organs in the first case that should present itself to him after his return to his native country. The subject had evidently made a strong impression upon him, and had frequently engaged his attention and reflection. He had thoroughly studied the relations of the pelvic viscera, in their healthy and diseased conditions, and felt fully persuaded of the practicability of removing enlarged ovaries by a large incision through the wall of the abdomen. He knew very well that the Cæsarian section had been repeatedly performed with success, and he could perceive no reason why ovariectomy

should be attended with more difficulty to the surgeon, or greater hazard to the patient.

When Dr. McDowell undertook this operation, he was not aware that it had ever been performed by any one else, a precedence which certain writers have attempted to prove. In speaking of his first case, he distinctly states that he had "never seen so large a substance extracted, nor heard of an attempt or success attending any operation, such as this required."* Nor was such an operation ever performed before. From all the testimony that I have been able to collect upon the subject, I am satisfied that it was first executed by Dr. McDowell.

Until I had carefully investigated this matter, I was of the opinion, in common with many others, both in this country and in Europe, that a foreign surgeon, L'Aumonier, of Rouen, had anticipated our countryman in this bold and daring undertaking. The attempt to remove this organ is said to have been made by this gentleman as early as 1776. Upon inquiry, however, I find that this was not the fact, and that the case upon which he operated was one merely of abscess of the ovary, consequent upon parturition. There was, of course, no necessity here for extirpation; all that was done by L'Aumonier was to puncture the abscess, to give vent to its contents. He never dreamed of excising the organ, and it is surprising that Dr. John Mason Good and other learned authors should ever have referred to the case as one of ovariectomy.

Equally unfounded, in this respect, are the claims of Professor Dzondi and of Professor Galenzowski, whose names precede that of Dr. McDowell, in the elaborate and valuable table of ovariectomy, by Dr. Washington Atlee, of this city. In a work published by the former of these writers, at Halle, in 1816, entitled "*Beiträge Zur Vervollkommnung der Heilkunde*," or, Contributions towards the Improvement of the Healing Art, is an account of a pelvic tumor, in which a cure was effected by drawing out the cyst through an incision in the

* Eclectic Repertory, vol. 7, p. 242. Philadelphia, 1817.

wall of the abdomen, and, after inducing mortification in it by means of long tents, extracting it piecemeal with a pair of broad forceps.* The tumor thus treated, however, was not ovarian, nor was the patient a female, but a lad, twelve years of age, of the name of Christopher Shultz, who had a circumscribed tumor as large as his head in the hypogastric region. Dzondi relates other examples of a similar nature, relieved by the same mode of management, and he expresses the opinion that this operation might be resorted to with equal success in ovarian dropsy, provided the sac is situated superficially, and is not affected with ulceration or scirrhus. It is difficult to conceive how such a case could ever have been adduced as one of extirpation of the ovary, the more so, when it is recollected that the author himself never advanced such a claim.

The case of Galenzowski, of Wilna, was also one very different from extirpation of the ovary. But this is not all; his operation was not performed until March, 1827, eighteen years after Dr. McDowell's now celebrated operation upon Mrs. Crawford. The tumor, in the case in question, was multilocular, of large size, and so firmly and universally adherent to the posterior wall of the abdomen as to render its total extirpation impracticable. Galenzowski, therefore, made a large incision into its cavity, according to the method of Le Dran; and then, passing his fingers into it, he tore up its cells, evacuated its contents, and secured the sac with a ligature to the external wound, to prevent the possibility of peritoneal effusion. On the thirty-second day a piece of the sac was found in the dressings; another was discharged on the fifty-second day; and, finally, a third on the sixty-second. The patient was discharged on the seventieth day, having only a small fistule in the hypogastric region.

The particulars of Galenzowski's case are contained in the twelfth volume of Graefe & Walther's *Journal der Chirurgie*; and in a translation of his paper, originally published in Latin, in the ninth volume of the North American Medical and Sur-

* American Medical Recorder, vol. 3, p. 62.

gical Journal, issued at Philadelphia, in 1830. An abstract of it will also be found in Malgaigne's *Operative Surgery*, by Brittan, p. 391, Philadelphia, 1851, and in the *Dictionnaire de Médecine*, T. 22, p. 592, Paris, 1840.

In consequence of the novelty of Dr. McDowell's operations, and of the loose manner in which they were drawn up for publication, an attempt was made by certain writers, both in this country and in Europe, to deny their authenticity, and to cast discredit upon the author's veracity. Among the various detractors who busied themselves in this way, no one was more loud and clamorous than Dr. James Johnson,* the editor of the *London Medico-Chirurgical Review*, a periodical well known in the United States. In speaking of Dr. McDowell's first case, he remarks: "Dr. Mac visited the patient at the end of five days, though she had come to his own residence to have the operation performed!! He found her engaged in making her bed! She soon returned to her native place quite well. *Credat Judæus, non ego.*" In adverting to the second case, the reviewer says: "We cannot bring ourselves to credit the statement." It is proper to add that Mrs. Crawford, the subject of the first operation, performed in 1809, and so sneeringly spoken of by Dr. Johnson, survived until 1841, or until after the completion of her seventy-eighth year; and that the authenticity of the second case, concerning which he expresses so much incredulity, is equally well established.

In a subsequent article upon this subject, published in October, 1826, the same writer indulges in the following language: † "A back settlement of America, Kentucky, has beaten the mother country, nay, Europe itself, with all the boasted surgeons thereof, in the fearful and formidable operation of gastrotomy with extraction of diseased ovaria. In the second volume of this series, page 216, we adverted to the cases of Dr. McDowell, of Kentucky, published by Mr. Lizars, of Edinburgh, and expressed ourselves as sceptical, respecting their

* *Eclectic Repertory*, vol. 7, p. 242. Philadelphia, 1817.

† *Medico-Chirurgical Review*, January, 1826.

authenticity. Dr. Coates, however, has now given us much more cause for wonder at the success of Dr. McDowell; for it appears that out of five cases operated on in Kentucky by Dr. McDowell, four recovered after the extraction, and only one died. There were circumstances in the narratives of some of the first three cases that raised misgivings in our minds, for which uncharitableness we ask pardon of God, and of Dr. McDowell, of Danville." Such language needs no comment; it speaks for itself, for it carries with it its own condemnation. When the learned, caustic, and ungenerous editor of the London Medico-Chirurgical Review indited it, he was ignorant—perhaps, wilfully ignorant—of the fact that he was slandering the father of ovariectomy, and speaking sneeringly of a State that has given birth to the first lithotomist, and the first American statesman of the nineteenth century.

But it need not surprise us that Dr. McDowell's cases of ovariectomy should have been treated with contempt abroad, when attempts were made to discredit them at home. What effect these attempts exerted upon the professional mind of the United States, it would be useless, at this remote day, to inquire; suffice it to say that they aroused the assailed party to a sense of self-defence, and caused the publication of additional cases, confirmatory of those that had previously appeared in the Eclectic Repertory.

It would seem that Dr. McDowell kept no notes of any of his cases, and that he was prevailed upon, with the greatest difficulty, to publish an account of the first three in the Eclectic Repertory. His nephew, Dr. William A. McDowell, states that he had to urge, among other inducements, the debt of gratitude which his uncle owed to Mr. John Bell, and his obligation to compliment that celebrated surgeon with an exhibition of the exploits of his pupil, in the execution of an operation, the practicability of which he had been at so much pains to teach in his lectures. This appeal had more weight in deciding Dr. McDowell than anything else that could be urged. He finally drew up an outline of his cases, referring to his ledger for his dates, and to his memory for the facts. They

were not written out with sufficient minuteness and precision; but they had, at least, two capital merits,—truthfulness and brevity. A copy of the paper, with a letter of acknowledgment, was forwarded to Mr. Bell, but this he never received. He was absent at the time, travelling on account of his health in Italy, whence he never returned alive. The paper subsequently fell into the hands of Mr. Lizars, who published it seven years afterwards, in the thirty-second volume of the *Edinburgh Medical and Surgical Journal*, in consequence of an attempt which he made to ovariectomize a female, to the peril of her life, who was found to be afflicted only with abdominal obesity.

Another copy of these cases was sent, in the autumn of 1816, to Dr. Physick, of this city, with a request that, if found worthy, he should have them published in some Medical Journal. It is not known whether the “Father of American Surgery” ever read the paper, or investigated the nature of the operation which it described; certain it is, he never took any notice of it, either to Dr. McDowell, his pupils, or any one else. He had no time to bestow upon the subject, or the subject was unworthy of his attention. He might have thought the author of the paper a backwoods impostor, or a man who was speaking for Buncombe.

Dr. William A. McDowell, who was the bearer of the above dispatch, was more successful in his interview with Dr. James, the modest, amiable, and benevolent Professor of Midwifery in the University of Pennsylvania. This gentleman had been in the habit of depicting to his pupils, with every revolving lecture term, and in the most harrowing language, the fatality and utter hopelessness of all attempts, past, present, and to come, to cure organic diseases of the ovaries by operation. He seized with avidity the intelligence communicated to him by the younger McDowell, and immediately requested an account of the cases for publication in the *Eclectic Repertory*, of which he was then one of the editors. He also read the cases to his class, who received them with the most rapturous applause.

The publication of the cases in the *Eclectic Repertory* elicited

hardly any notice. Indeed, so far as could be ascertained, it encountered general incredulity, if not positive ridicule. The paper of Mr. Lizars, in the *Edinburgh Medical and Surgical Journal*, met with a better fate; for it at once attracted marked attention, and produced strong excitement throughout the medical circles of Europe; a circumstance which reacted with electrical force and rapidity upon the United States. The question of the reliability of the reported cases was at once thoroughly investigated and established, and the operation has since been repeatedly performed with success in nearly all parts of the civilized world. Ovariectomy is now one of the established resources of surgery; and for this boon our profession and mankind are indebted to Dr. Ephraim McDowell.

It is not positively known, even to his most intimate surviving friends, how often Dr. McDowell performed the operation of ovariectomy. Dr. William A. McDowell, who was a member of his family for nearly seven years, five as a student, and two as a partner in practice, states that up to the period of his removal to Fincastle, Virginia, in 1820, his uncle had had seven cases, all, save one, successful. Six of these operations Dr. McDowell witnessed, and in two he handled the knife under Dr. Ephraim McDowell's direction. "I acted," he modestly adds, "in the capacity, as I conceived, of a sort of an amanuensis." "In his first operation," continues this gentleman, "in 1809, Dr. James McDowell, who was Dr. Ephraim McDowell's nephew, partner, and brother-in-law, and a young man just commencing practice, used the knife under similar circumstances, as it respects the external incision. Dr. Ephraim McDowell had, at the time, determined to decline practice in favor of Dr. James McDowell. The death of the latter occurring shortly afterwards, changed the arrangement. Under the same circumstances, Dr. A. G. Smith, who succeeded me as a partner of Dr. McDowell, operated in two or three cases."

Dr. William A. McDowell informed me that he had reason to believe, from reliable testimony, that his uncle performed this operation altogether thirteen times, exclusive of the cases of Dr. Smith. He declared that he himself had been cognizant of

two more successful cases: one, that of Mrs. Overton, of Tennessee, and the other, that of Miss Gilmore, of Pulaski County, Kentucky; making in all, eight cures, respecting which there can be no doubt. Dr. McDowell's success does not seem to have been so great in his latter as in his earlier operations, but the precise ratio cannot now, unfortunately, be ascertained.

It may not be improper to state, in concluding the consideration of this part of Dr. McDowell's professional services, that an attempt was made, many years ago, to deprive him of the credit of his first operation, by ascribing the performance of it to his nephew, Dr. James McDowell, at the time his partner in practice. In consequence of this attack upon his veracity and pretensions to surgery, Dr. McDowell was induced, in 1826, to address a printed card to the "physicians and surgeons of the West, and particularly, to the medical faculty and class at Lexington," in vindication of his claims. After remarking that he had visited Mrs. Crawford, the subject of the operation in question, at her residence in Green County, Kentucky, a distance of sixty miles from Danville, for the purpose of examining her case, and that she soon after came to his own house to undergo the operation of ovariectomy, he says: "My nephew, Dr. James McDowell, whom I had brought up, had graduated a few months before this time, in Philadelphia, and had commenced business as my partner. Being in delicate health at the time, it was my intention to remove to the country in the spring, or so soon as I could establish my nephew in business.

"From the time of Mrs. Crawford's arrival, he had made frequent attempts to persuade me from operating; but, finding my determination was fixed, he agreed to be present, but not until the morning I operated, and as my partner, to assist; for should the patient die, the responsibility was all my own; should the patient live, it would assist him in his outset in business.

"The day having arrived, and the patient being on the table, I marked with a pen the course of the incision to be made; desiring him to make the external opening, which, in part, he did; I then took the knife, and completed the operation, as

stated in the Medical Repertory. Although the termination of this case was most flattering, yet I was more ready to attribute it to accident than to any skill or judgment of my own; but it emboldened me to undertake similar cases; and not until I had operated three times—all of which were successful—did I publish anything on the subject. I then thought it due to my own reputation and to suffering humanity to throw all the light which I possessed upon diseased ovaria."

It is not necessary that I should enter into a formal examination of the claims of Dr. McDowell as the author of the operation in Mrs. Crawford's case. The paper from which I have quoted the above extracts, is accompanied by three certificates, all testifying to the truth of Dr. McDowell's statement. One of these certificates is from Mrs. Crawford herself; another from Mrs. Baker, one of her female attendants; and the third from Mr. Charles McKinny, a private pupil of Dr. McDowell, who, with Mrs. Baker, witnessed the whole proceeding. He states, expressly, that Dr. James McDowell made the external incision as directed by his uncle, and that then the latter took the knife and extracted the diseased ovary. He asserts, moreover, that he never heard Dr. James McDowell claim the credit of the operation. When we add to these facts, the statement of Dr. William A. McDowell, that he and Dr. Smith both assisted Dr. Ephraim McDowell, on several occasions, in the same manner, it follows, as a necessary corollary, that the claims set up in behalf of Dr. James McDowell, who is said to have been a young man of great professional promise, must fall to the ground as untenable.

I have endeavored to establish the claims of Dr. Ephraim McDowell, to the operation in question, upon a firm and immutable basis. My only motive for so doing has been a wish to defend truth, to subserve the interests of surgical science, and to award credit where alone credit is due. How far I have succeeded in my effort, let others judge.

But Dr. McDowell's claims to distinction do not, by any means, rest upon his exploits, novel and brilliant as they were, as an ovariectomist. He ranked also deservedly high as a

lithotomist. For a time he was almost the only physician in Kentucky who performed this operation. In the latter period of his life, he was eclipsed, in this branch of surgery, by his neighbor, Dr. Dudley, of Lexington, who, after the establishment of the Transylvania Medical School, for many years almost monopolized the stone cases in Kentucky and the adjacent States. It is not known how often Dr. McDowell performed this operation; but it is positively ascertained that he had, up to 1828, two years prior to his death, executed it thirty-two times, and that without the loss of a single patient. Such success is as rare as it is creditable to Dr. McDowell's skill and judgment. He confined himself to the lateral method, and early in life opened the bladder with the gorget, but afterwards made his deep incisions with the knife.

One of his most interesting cases, not from any peculiar circumstances or merit, but from the exalted position afterwards attained by the patient, was that of the late James K. Polk, President of the United States. This gentleman had suffered from symptoms of vesical calculus from an early period, and in his seventeenth year he was induced to visit Danville in search of advice. The operation was performed in the autumn of 1812, with Dr. McDowell's usual skill, and a happy recovery was the consequence. The calculus was of small size, very hard and heavy, with a rough, tuberculated surface. Mr. Polk carried it home with him, not in his bladder, but in his pocket, to show it to his friends and neighbors, with whom it was a source of great curiosity. In a letter, dated in Maury County, West Tennessee, December 8d, 1812, he informs his surgeon of the progress of his cure, and feelingly expresses his sense of gratitude for the services which he had received from him. This letter, as a specimen of literary composition, is far below mediocrity; it is badly spelled, and written in the worst style. In these respects, it is in striking contrast with another letter addressed to Dr. McDowell, nearly fourteen years afterwards, when Mr. Polk represented his adopted State in the Congress of the United States. In this communication, written with great accuracy, and even eloquence, Mr. Polk again expresses his gratitude to

Dr. McDowell; speaks of the excellence of his health, and alludes to the manner in which he had spent his time since his recovery from the operation. "I have been enabled," he says, "to obtain an education, study the profession of the law, and embark successfully in the practice; have married a wife, and permanently settled in Tennessee; and now occupy the station in which the good wishes of my fellow-citizens have placed me. When I reflect, the contrast is great indeed, between the boy, the meagre boy, with pallid cheeks, oppressed and worn down with disease, when he first presented himself to your kind notice, in Danville, nearly fourteen years ago, and the man at this day in the full enjoyment of perfect health." I take great pleasure in alluding to these letters of Mr. Polk. The career of that gentleman, and that of his surgeon, show how early obstacles may be vanquished by industry, and how perseverance enables men, from small beginnings, to attain to great ends.

Dr. McDowell performed numerous other operations, but of their nature I am not apprised; nor would it be necessary, if I were, to refer to them particularly here. His anatomical knowledge, courage and dexterity were sufficient to enable him to execute any operation that might have been required within the extensive circle of his practice. It cannot be supposed, for a moment, that the man who was the first to excise a diseased ovary, and who cut thirty-two patients for stone without a single failure, would shrink from the performance of any surgical duty, however novel or hazardous, provided he was certain that it was imperatively demanded by the circumstances of the case.

He paid much attention to the subject of hernia. He often operated successfully for the relief of strangulation, and performed many radical cures by means of the truss. His reputation in this branch of surgery attracted patients to him from a great distance. President Polk, early in life, was one of his subjects, and one of those who were permanently cured by his skill.

As a surgeon, Dr. McDowell was exceedingly cautious. He

never undertook an operation until his own mind and the patient's system were prepared to his entire satisfaction. Notwithstanding his extraordinary accuracy in anatomical and surgical knowledge, he never operated, in any important case, without carefully reviewing the relations of the structures involved, and referring to the best surgical authorities in his library on the subject. His pupils were obliged to do the same thing, as well as to examine the case, and favor him with their opinion on it. His assistants were carefully selected, and regularly drilled, until, like so many Thespians, they perfectly understood their parts.

He was remarkably kind to his patients, sympathizing with them in their suffering, and encouraging them by tender and soothing expressions. His hand never quivered in an operation; nor did his mind quail; but his face flushed, and even in the depth of winter, the perspiration often started from every pore. Dr. Alban G. Smith, now Dr. Goldsmith, who knew Dr. McDowell intimately, and who is himself an excellent operator, writes me that he was the best operator he ever saw, in all cases where he had a rule to guide him. He always preferred to operate on Sunday mornings, saying that he liked to have the benefit of the prayers of the church.

He was an accomplished anatomist. He made it a business to dissect, more or less, every winter, and he took special pains, on such occasions, to aid his pupils in acquiring a knowledge of the human structure. Subjects were not always obtained, at that period, without trouble and even risk.

Dr. McDowell was no writer. The only contributions he ever made to medical literature are his first five cases of ovariotomy, in the seventh and ninth volumes of the Philadelphia Eclectic Repertory. It is a subject of deep regret that he should have felt, throughout the whole of his life, such a deep repugnance to the publication of the results of his experience. Extensively engaged as he was for so long a period in the practice of medicine and surgery, he must have accumulated a vast amount of knowledge, most valuable to the profession and to suffering humanity, and eminently conducive to the

extension of his own fame. But such exercise was distasteful to him, and no remonstrance, on the part of his friends, could induce him to engage in it. Temporary notoriety and posthumous fame were subjects alike of indifference to him. He pursued the "even tenor of his way," and his habits were so confirmed that it was impossible to change them.

Dr. McDowell was an honorary member of several medical associations. The Medical Society of Philadelphia, one of the oldest and most respectable institutions of the kind in the country, sent him its diploma in 1807. In 1825, he received from the University of Maryland, then in the height of its renown, the honorary degree of Doctor of Medicine,—a distinction which was a full acknowledgment of his exalted reputation,—and which afforded him genuine gratification, the more especially as it was unsolicited on his part.

Had Dr. McDowell lived in France he would have been elected a member of the Royal Academy of Surgery, received the cross of the Legion of Honor from the King, and obtained a magnificent reward from the government, as an acknowledgment of the services which he rendered his country, his profession, and his fellow-creatures. His own country, and especially his own neighborhood and State, failed to appreciate him. I am told by gentlemen whose veracity is indisputable, that but few of his immediate fellow-citizens were capable of drawing a just distinction between him and the merest charlatans in his vicinity. Such must ever be the fate of true greatness in all new communities. Dr. McDowell had the misfortune to live before his time; he was born in advance of his age.

He was a kind-hearted, amiable man, an urbane and accomplished gentleman, a benevolent physician, a warm and generous friend, an excellent neighbor, an affectionate husband, and an indulgent and anxious parent. His character, in all the relations of life, was most exemplary. Of a lively, social temperament, abounding in wit and pleasantry, he was the master-spirit and delight of every company which he honored with his presence. No man was ever more agreeable, more

amusing, more unassuming. Frank in his manners, and easy of access, it was impossible to be a stranger in his society, or to leave his presence without a feeling of regret.

As a scholar he was entitled to no ordinary rank in comparison even with some of his most distinguished contemporaries of the learned profession of which he was a member. He was much devoted to study, especially in early life, and was a most admirable recitationist. He was fond of Greek and Latin, a knowledge of which he retained long after his return from Europe. But historical and belles-lettres literature occupied more of his time and attention than classical and scientific works. Burns and Scott were his greatest favorites. In his readings of these authors, he rolled the Scottish idiom upon his tongue in a manner perfectly indescribable. His recitations from Scottish dialogues, adapting his intonations to the supposed character of the speaker, were richer and more exciting than any theatrical exhibition.

He was fond of music, and sung a variety of odes and catches in Latin, English, and Scotch, in good taste and with fine comic effect. His favorite pieces—those of a comic and humorous character—he frequently accompanied with his violin, an instrument to which he was very partial, but upon which he was a poor performer. Like Themistocles, the Athenian, “he could not fiddle, but yet he could make a small town a great city;” he could achieve wonders in surgery, such as had never been achieved before; and thus immortalize his State and country.

His excellence in the Scottish dialect and melody is probably attributable to his summer rambles in Scotland, during the vacations of the medical sessions in the University of Edinburgh. In company with two of his classmates, Dr. Brown and Dr. Speed, of Kentucky, he perambulated a considerable portion of that “land o’ cakes,” much to their mutual delight and edification. They travelled on foot, each packing a change of clothes in a wallet. In the tour, Dr. McDowell met with several respectable members of his family connection, who recognized and received him as a clansman, pretty much

after the style and manner of hospitality commemorated and immortalized by Burns and Scott.

The travellers were well provided with letters to distinguished personages "en route," who never failed to treat them with marked attention and respect. On approaching the residences of these individuals, they always hired a conveyance, and riding up in due form and style, were received accordingly. They, however, if their entertainment was to their liking, soon "let the cat out of the wallet;" immediately upon which all formality ceased, and they were carried about, all over the neighborhood, either on horseback or in a coach, as they happened to fall in with a commoner or a "gig-man," and exhibited to all sorts of people as gentlemen from the extreme backwoods of America. It is very questionable whether the United States have had, at any time since, the good fortune to be more creditably represented in that ancient and interesting country; a trio of equal intelligence, of fine looks, wit, and good fellowship is rarely to be found anywhere.

After his return to Kentucky, Dr. McDowell frequently recurred in terms of the greatest delight, to the happy hours spent in these peregrinations, recounting with peculiar glee the incidents which befell him and his backwoods companions. He ever after cherished a warm attachment for the Scotch, their beautiful and romantic country, and their noble, scientific, and charitable institutions.

His library was quite extensive for the period in which he lived, consisting of all the standard medical works, many of which he had brought from Europe. On the practice of physic he always procured and read the most celebrated authorities; more, says one of his pupils, on account of his students, of whom he always had a considerable number, than of his patients. He was an ardent admirer of Sydenham and Cullen, and never could appreciate any advances worthy of note upon these celebrated writers. With many of his contemporaries, he regarded the portraiture of disease, delineated by the hands of these masters, as inimitable. In his judgment, all other writers on the practice of medicine were mere bunglers and copyists;

a decision in which nearly all intelligent professional men at that period concurred. He was in the habit of earnestly cautioning his students against too free a use of medicines. As a *secret*, he apprized them of his impression that the employment of medical drugs was more of a curse than a blessing to the human race, and that quackery perpetrated much more mischief and destruction by their means, than the science of the profession could counteract. In the surgical branch of the profession he took great delight; he characterized it as the *certain* branch of the healing art, and spared no pains to advance and perpetuate his knowledge of it. He does not seem to have had any particular fondness for the practice of medicine, as he always had a partner upon whom devolved most of this kind of business, especially after he had achieved some reputation as a surgeon.

His fees for surgical operations were regulated, as a general rule, by the ability of his patients. As might be supposed, from the extent of his practice, and from his benevolent disposition, he frequently rendered his services gratuitously. Pauper patients, no doubt, often went to him from a great distance, and McDowell would have been the last man to turn a deaf ear to their entreaties for advice and relief. To a humane surgeon, fully appreciating his duty, the claims of the sick poor appeal with irresistible force, proving paramount to every selfish consideration; they are his best subjects, because, in the language of Boerhaave, God is their paymaster, and because the expression of their gratitude is voluntary, not extorted in the hope of obtaining a small bill for services received from their professional attendants.

Occasionally his fees were large; in one instance almost princely. I allude to the case of Mrs. Overton, upon whom he performed the operation of ovariectomy, in the summer of 1822. This lady lived in the vicinity of the Hermitage, in Tennessee, the residence of the late President Jackson, and Dr. McDowell had agreed to operate upon her, at her own house, for five hundred dollars. He remained with her for some days, and on the morning of his departure her husband, a highly respect-

able and intelligent citizen, gave him a check, as he supposed, for the stipulated sum, on one of the banks of Nashville. On presenting it, he discovered that it was drawn for fifteen hundred dollars, instead of five hundred. Presuming that a mistake had been made, he immediately despatched his servant to the gentleman, who replied that no mistake had occurred, and that the services he had received from Dr. McDowell more than counterbalanced the sum he had paid him. Such generous liberality was alike honorable to the giver and to the receiver. So far as I know, this was the largest fee ever paid in this country for a surgical operation. Considering the value of money at that time in the Southwest, or, in other words, the cheapness of living, and the comparatively small compensation for professional services generally, it was fully equivalent to the celebrated fee of a thousand guineas paid by Mr. Hyatt, a West Indian merchant, for an operation performed upon him by Sir Astley Cooper.

Dr. McDowell was not wealthy; his estate at the time of his death was estimated at from forty to fifty thousand dollars. His mode of living was plain and unostentatious; he was always glad to see his friends, and to extend his hospitalities to them.

He was a man of enlarged and liberal views. He spent his money and his time freely upon charitable objects, and manifested great interest in advancing the prosperity of Danville, the scene of his professional labors and renown. Of Centre College, located at that town, and at present the most successful literary institution in Kentucky, he was one of the founders and original trustees; subscribing liberally towards its support.

Dr. McDowell was always a decided Christian in his feelings and conduct. At the time of his settlement at Danville, in the latter part of the last century, nearly the entire male population of the village was atheistically inclined; and not a few were of the Robespierrian school, having achieved the grand discovery that "death is but an eternal sleep." With these men he had no sympathy, though he was of too benevolent and tolerant a nature to fall out with any one for entertaining different tenets from his own.

In 1828, he united himself with the Episcopal Church, and granted a lot at Danville, on which was afterwards erected the present church edifice of that town.

Dr. McDowell expired at Danville, on the 25th of June, 1830. His disease was inflammatory fever, terminating his life on the fourteenth day of the attack, in the fifty-ninth year of his age. For him death had no terrors, the grave no victory. He awaited his end with the patience of a Christian, and the calmness of a philosopher. He had "set his house in order," and met death with a serene and composed mind. From the very moment of his seizure, he had a presentiment that he should not survive it.

To the professional pilgrim of the West, it will not be uninteresting to know that the remains of Kentucky's first great surgeon repose in the family burial-ground of Gov. Shelby, five miles from Danville. His tombstone, a plain slab of marble, bears the simple inscription of his name, "Ephraim McDowell."

In person, Dr. McDowell was nearly six feet in height, with a florid complexion, and very black eyes. He was of a remarkable happy disposition, and rather inclined to corpulency. Up to the very time of his sickness, he was one of the most active men in Kentucky. As an illustration of his agility and muscular strength, the following anecdote, which he often narrated with special glee, affords a striking example. While he sojourned in Edinburgh, a celebrated Irish foot-racer, a sort of Mike Fink, arrived, boasting that he could out-run, out-hop, and out-jump any man in the city, and bantering the whole medical class. McDowell was selected as their champion. The distance was sixty yards, and the stake ten guineas; the trial took place in the College grounds, and the American purposely allowed himself to be loser. A second race for one hundred guineas, and at an increased distance, came off soon afterwards, and this time the Irishman, after much bullying, was badly beaten, much to his own chagrin, and the gratification of the students.

Dr. McDowell remained faithful to his profession until the last moments of his life. He literally died in the harness. A

few months before his final illness, he commenced the building of a large and beautiful mansion in the country, two miles from Danville, where he had intended to spend the evening of his life, away from the cares and fatigues of a busy practice. Death, as has already been seen, frustrated this design. The mansion was finished, but was occupied by other tenants.

SAMUEL D. GROSS.

SAMUEL BROWN.

. 1769—1830.

It is the lot of some individuals to exhibit in their writings proofs of their genius and of their scientific attainments, as well as the record of the application they have made of these to various useful purposes; and to be able thereby to receive, while yet living, expressions of gratitude and praise from those they have instructed or amused. But such individuals may be considered as constituting a limited portion of those who come within the scope of biography. Others, no less entitled to live in the remembrance of society, have been, as it were, useful in silence, or have modestly refrained from displaying through the medium of the press, their own merits and success, and from giving in this way to the public at large, an opportunity of forming an estimate of their moral and intellectual character.

The former need, much less than the others, the aid of the biographer to transmit their names to succeeding generations, and to insure a remembrance of their services. The knowledge of their virtues, also, is more widely disseminated; for we are naturally inquisitive in regard to the private character of distinguished writers. The reputation of the other class of individuals, on the contrary, is in great measure local, or at least, confined within a much narrower circle: and whatever may have been the degree of their talents and usefulness, or the conspicuousness of their moral qualities, their names are seldom handed down beyond the following generation. They soon cease to receive due credit for their good qualities; for the improvements they may have introduced in the useful arts,

or for their success and discoveries in science, unless the knowledge of these be rescued from oblivion through the instrumentality of the biographer.

It is in this class that the subject of the present memoir, Dr. Samuel Brown, must be placed. Regarding the mere consciousness of being serviceable to the community at large, as a sufficient recompense for his exertions and labors, he has left few publications of any note; none in which are embodied and described the results of his scientific researches, and from which the public can form a correct idea of his efforts for the advancement of useful knowledge. His virtues, too, have remained in great measure concealed from all but his friends and acquaintances.

And yet, Dr. Brown, as will be seen in the course of the following pages, merits, in more respects than one, to receive a more particular notice than is commonly accorded to our deceased professional associates. Impressed with this belief, the author has taken the liberty of transgressing somewhat the rule adopted in the preparation of volumes like the present, by giving to this sketch greater extension than he had originally intended.

He had hoped that some one more competent than himself, and who, unconnected with Dr. Brown, by the ties of the tenderest friendship, could expect to escape more surely the charge of partiality, would have been found prepared for the task of offering a sketch of the life, and a portraiture of the character of that gentleman. But in this he has been disappointed, and sooner than that it should be neglected any longer he has yielded, though not without reluctance, to the expressed desire that he should perform it himself.

Dr. Samuel Brown was born in the month of February, 1769, in the county of Augusta, now Rockbridge, in the State of Virginia. His father, the Rev. John Brown, had founded a grammar school in the immediate vicinity of his residence, with the view to the education of his sons, and of a number of other young gentlemen of the neighborhood. The course of instruction at this school was not limited to the rudiments of a

mere English education, but extended to the higher branches of useful knowledge. The dead languages, in particular, were carefully taught by students of divinity, under the direction of the founder. It was in this institution, that Dr. Brown, under the watchful eye of his tender and learned parent, laid the foundation of his classical education. At the age of sixteen years he was transferred to the family of the Rev. James Waddell, who superintended a seminary of learning in Louisa County, Virginia, and whose eloquence and style of oratory have been described in such glowing colors by the distinguished author of "The British Spy," Mr. William Wirt. After remaining under charge of Mr. Waddell about eighteen months, Dr. Brown was removed to Dickinson College, in the State of Pennsylvania, where he entered as a Junior, and at the expiration of his senior year, graduated with distinguished honor as a Bachelor of Arts. ✓

Soon after the completion of his collegiate education, he returned to his native State, and immediately applied himself to the study of medicine, under the direction of his brother-in-law, Dr. Humphreys, a physician of high reputation, and who was then engaged in extensive practice at Staunton. After enjoying, during several months, the private instruction of his experienced relative, Dr. Brown proceeded to Philadelphia, at that time the only city in the Union possessing a regular medical school; and he became the private pupil of the late Dr. Rush. But although Philadelphia presented to him many sources of attraction, and he could not fail to derive great benefit from an attendance on the lectures of his illustrious preceptor, and of the other members of the faculty, yet the means of instruction the school afforded were far from fulfilling his expectations, or enabling him to satisfy his ardent thirst for knowledge. In consequence, and influenced, no doubt, also by the desire natural in individuals of his age, disposition, and tastes, of extending the sphere of his observation to another part of the world, the seat of learning, science, and refinement, our friend determined to visit Europe, and there complete the medical education he had commenced under such favorable

auspices in his own country. With this in view, he proceeded to Edinburgh, where he devoted himself with his accustomed zeal and ardor to the acquisition of professional knowledge, while at the same time he paid a greater degree of attention to the subordinate, as well as to the more general, branches of learning than is usually done by the majority of medical students. Previously to his returning to his native country, Dr. Brown visited the other universities of Scotland, and particularly that of Aberdeen, where he obtained the degree of Doctor of Medicine, which he had neglected to take at Philadelphia, and to which, at Edinburgh, he could not pretend, in consequence of his not having fulfilled certain of the requisitions of that celebrated school. It may not be improper to remark in this place, that at Edinburgh, Dr. Brown was the contemporary and friend of Drs. Hosack, Davidge, Brockenborough, McDowell, and of several other Americans, who have since risen to eminence, and occupy a deservedly distinguished position in the annals of American medicine.

On his return to America, Dr. Brown entered upon the duties of his profession, in the vicinity of what is now the city of Washington, where he speedily acquired a high reputation, for practical skill and assiduous care of his patients, and obtained an extensive and lucrative practice. Notwithstanding this success, which, considering his comparative youth, and the short period which had elapsed since his admission to the doctorate, could not fail to prove not only encouraging, but highly flattering to him, Dr. Brown was unable to reconcile himself to a separation from the members of his family,—the majority of whom had emigrated to the western country. The desire to join them, and to enjoy the pleasure of their society, was far more powerful than that of amassing wealth. This desire he soon found it impossible to resist, and in consequence, left the shores of the Potomac in 1797, and crossing over to Kentucky, fixed his residence in the family of his brother, Mr. James Brown, who some time previous had commenced the practice of the law, in the town of Lexington.

As might naturally have been anticipated by all who were

apprised of his talents and activity, Dr. Brown was not long in acquiring at Lexington a reputation equal to that he had enjoyed elsewhere, and in securing the confidence of a large number of the most respectable part of the population of the town and surrounding country. His reputation, indeed, soon spread over the whole State, and he was consulted far and wide.

In 1804, Mr. James Brown, whose health obliged him to seek the benefit of a climate milder than that of Lexington, removed to the city of New Orleans, where he fixed permanently his residence. Dr. Brown, who continued to live in his brother's family from the first period of his emigration to Kentucky, in 1797, obeying the impulse of feelings similar to those that had induced him to remove to Kentucky, unhesitatingly abandoned Lexington, to the regret of a large circle of friends; and descending the Mississippi in 1806, joined his brother in New Orleans, and entered almost immediately upon the duties of a large practice.

About two years subsequently, he made an excursion to Natchez, where, in the following year, he married Miss Catharine Percy, the daughter of an influential and wealthy inhabitant of that place. Dr. Brown's success in New Orleans had been so rapid, and his prospects were so flattering, that he naturally felt unwilling to abandon a third time the chance of acquiring renown and wealth; but the desire of Mrs. Brown to remain in the vicinity of her relations, became for him a law, which no personal considerations could induce him to disregard. He, in consequence, abandoned New Orleans, and settled quietly on a plantation, situated at a short distance from Natchez. From that time he gave up the practice of medicine, continuing, however, to extend to his friends, and especially to the poor of his neighborhood, the advantages of his professional skill.

Dr. Brown was not destined, however, to enjoy long the domestic happiness, which his union with an intelligent and lovely woman, his connection with an honorable and influential family, and his easy pecuniary circumstances, were so well

calculated to lead him to anticipate. A few years only had elapsed since his marriage, when his wife, in whom his hopes of happiness were in great measure centred, was snatched from him, and from her devoted family, by the unrelenting hand of death, leaving to his paternal care, three small children, the last of whom soon followed its mother to the grave.

After so afflictive a dispensation of Providence, Natchez could no longer prove an agreeable place of residence to Dr. Brown. Every surrounding object reminded him continually of the loss he had sustained, and served to increase and perpetuate his sorrow. He determined, therefore, notwithstanding the affectionate attentions and entreaties of his wife's relatives, to leave Natchez, and soon after removed to the territory of Alabama. With the negroes he had brought with him from the lower country, he established a plantation near Huntsville, and in the immediate vicinity of his brother-in-law, and intimate friend, Colonel Thomas Percy, and of his no less intimate friend, the Hon. James Walker, who some years after filled with great credit, a seat in the Senate of the United States.

Dr. Brown now devoted himself almost exclusively to the education of his children, and for several years was scarcely a day separated from them. As soon, however, as his daughter, the elder of the two, had attained an age to justify her departure from her parental roof, for the purpose of being placed under proper instructors, he determined to put in operation a plan, his active mind, which always required useful occupation, had suggested to him,—that of establishing in the western country a medical school, at which students from that part of the Union as well as from the Southern States, could gain the requisite instruction, without the inconvenience and expense of seeking it in the schools of the Atlantic States.

His first purpose was to co-operate with Dr. Drake, and establish this school at Cincinnati. In a short time the plan was so far matured, that Dr. Drake, early in 1819, obtained a charter from the State of Ohio, and caused Dr. Brown's name to be inserted in it as a professor, in conformity to a law, which required that the names of all the gentlemen who were

to be connected with the institution should be so mentioned. While, however, this movement was in progress in Ohio, an offer was made to Dr. Brown, by the Trustees of the medical department of the Transylvania University, established at Lexington, of a chair in that institution. Regarding this offer as highly advantageous to him, considering also that the establishment of a medical school at Lexington held out more certain prospects of success than at Cincinnati, impelled besides by the reflection that Lexington would prove more agreeable to him as a winter residence, containing, as it did, many of his old associates, and being at no great distance from the residence of some of his dearest relatives; finally, unapprised and even doubtful of the success of Dr. Drake in obtaining the charter already alluded to, Dr. Brown determined in favor of Lexington. Having accepted the offered professorship, he entered without delay on the duties of the chair assigned to him, that of the Theory and Practice of Medicine, and was for a long time actively engaged in organizing the school. In this important undertaking he was ably seconded by Drs. Benjamin W. Dudley, William H. Richardson, and Charles Caldwell, all of whom continued for many years, to hold with great distinction, their connection with that institution. The reputation and popularity of Dr. Brown, as also of the three gentlemen I have just named, commanded for this school, a considerable share of attention in the Western country, and attracted thither a large class of students. The school acquired rapidly great renown, which was, in 1823, increased, by the accession to the list of professors, of Dr. Brown's friend, Dr. Drake, who, after abandoning his enterprise at Cincinnati, was induced by him and the other professors, to accept the chair of Materia Medica and Botany. Impelled by the desire to enjoy once more the society of his brother, Mr. James Brown, then Minister from this country to the court of France, and whom he had not seen for some years, as well as to add to his stock of knowledge, in the various departments of medical science, Dr. Brown, during the recess of the college, in the summer of 1824, repaired to Paris, where he

remained several months, and was noticed in the most flattering manner, by many of the distinguished men of that metropolis.

He returned to the United States in the month of November, and after spending a few days in Philadelphia, hastened to Lexington, to complete the course of lectures which, during his absence, his friend, Professor Drake, had volunteered to commence for him.

Discovering shortly after, that the school had acquired sufficient celebrity to insure its stability and success, and that his attendance at Lexington during the session of the medical lectures, interfered greatly with his other engagements, particularly with the frequent visits his interests required him to pay to his estates in the South, and with the no less frequent visits his duty and feelings impelled him to make to his daughter and friends in the Atlantic States, and finally, desirous of obtaining repose, which a gradual deterioration of health, the natural effect of sedentary habits and devotion to the duties of his chair, had now rendered absolutely necessary, Dr. Brown, in the spring of 1825, tendered his resignation in favor of his friend, Dr. Drake, who was unanimously appointed his successor. After spending a few months in the city of Philadelphia, and visiting the Falls of Niagara, he retired to Alabama with his children, where he proposed to fix his permanent residence. In the year 1827, he once more repaired to the last-mentioned city, whence, some months after, he embarked for Europe, with a view of again visiting his brother, and of transacting some family affairs. In the month of September, 1828, he returned once more to this country, and soon after his arrival repaired to Alabama.

Dr. Brown's constitution was naturally robust and plethoric, and for a number of years he had enjoyed uninterrupted and excellent health. But in 1826, while travelling in the Western States, he experienced for the first time, an attack of cerebral congestion, which deprived him for some time of the power of speech. By proper measures, this alarming condition was soon removed, and he was enabled to complete his journey without

further accident. From this period, however, he became predisposed to the above disease. During his residence in Philadelphia, in the winter of 1827-8, he was threatened often with a repetition of it, as indicated by vertigo, pain and sense of fullness in the head, attended at times with loss of memory.

During his passage to Europe, in the spring of 1828, and on his return home, in the autumn of the same year, he was seized with very severe attacks, which now assumed an epileptic character. The following spring, he was once more affected in a similar way; but after this, so far recovered as to entertain the hope, and inspire the same in his friends, that he was now entirely secure from a repetition of this alarming complaint. This hope, unfortunately for himself and his friends, was not to be realized. On the evening of the 24th of December, 1829, a few days only after writing to his daughter, who had recently returned from Europe with her uncle, Mr. James Brown, and to the writer of these pages, in a strain which plainly indicated a cheerfulness of mind and a warmth of feelings incompatible with disease, and announcing his intention of leaving Alabama shortly afterwards, on a visit to Philadelphia, he was seized with an apoplectic attack, which, notwithstanding every means that art or friendship could suggest, proved fatal on the 12th of the succeeding month.

In his death, the medical profession of this country and, indeed, the community at large, experienced a great, and his friends an irreparable loss. Endowed by nature with a powerful and suggestive if not inventive intellect, which he assiduously and successfully cultivated; animated at the same time by a fixed and laudable desire to apply his resources to the promotion of public good rather than of his personal interest, Dr. Brown, without enriching the professional literature of this country with any work of magnitude or note on important points of science, succeeded in rendering himself useful to his countrymen to a greater extent than falls to the lot of the generality of medical men. That this is not an exaggerated estimate of his usefulness,—the natural effect of the friendly feelings which the author entertained for him,—will readily appear from a brief

survey of the principal subjects to which he directed his attention.

During his first residence in Kentucky, Dr. Brown, although engaged in extensive practice, found sufficient leisure and means to enlarge the sphere of his usefulness. He devoted considerable time and took much pains in organizing a course of instruction for a private class of medical students; delivered gratuitously, in the Transylvania University, lectures on Chemistry; founded societies for the discussion of questions relating to literature and science; and gave, as I have been informed by one well calculated to judge, an impulse to the minds of the young men of the State, which had a favorable influence on their future pursuits and morals. Nor was this all. He was, at the same time, actively engaged in promoting the progress of agriculture and the useful arts, and in introducing in Kentucky various improvements originating not only in the Atlantic States but also in Europe.

While thus occupied, Dr. Brown was fortunate enough to suggest some improvements in the arts, which have since been turned to considerable advantage in the Western States, and have been found equally useful in other parts of our country. He it was, for example, who first suggested the process, now in general use, for clarifying or cleansing ginseng, and thus rendering that article suitable for the Chinese market. It also occurred to his active mind, from some chemical experiments he had witnessed, that steam could be applied with advantage to the distillation of spirits, not only with a saving of time and expense, but as a means also of avoiding the empyreumatic flavor which affects, more or less, all liquors that come in immediate contact with fire. In conjunction with a friend, he instituted a series of experiments, with a view of ascertaining how far his ideas on the subject were well founded, and had the gratification to discover that the process could be applied with the greatest advantage, on a large scale. Satisfied with the reflection of having been instrumental in introducing an improvement likely to lead to results advantageous to his countrymen, Dr. Brown, generously yielding to the friend to whom I have

alluded, all the pecuniary benefit that might accrue from it, advised him to obtain a patent for it, and turn it to use. This was effected without delay, and the process has found its way both to the Atlantic States and to Europe, and is now applied to many other operations of kindred nature.

Every individual exhibiting talent and possessing habits of industry, whose mind was devoted to the pursuit of useful objects and the cultivation of sciences or arts, was certain to find in Dr. Brown a willing and enlightened adviser, always a kind friend, and not unfrequently a munificent patron. In proof of this, it will be sufficient to remark, that one of the American artists that have conferred the highest honor upon their country in England, owed, in a great measure, to the liberal pecuniary aid he received at the hands of Dr. Brown, the advantage of being able to complete his studies among the classical models and under the directions of the masters of modern Italy.

Nor were the exertions of the subject of this memoir limited to the improvement of the useful and liberal arts. About the year 1798 or 1799, an effort was made in Kentucky to obtain a convention for the purpose of amending the Constitution of the State. Believing that the moment was favorable for the adoption of a plan for the emancipation of the slaves, then few in number comparatively to the white population, Dr. Brown united with his brothers, John and James Brown, and Mr. Clay, in strongly advocating the measure. His pen, as also his influence in public assemblies, to use the language of one who was no stranger to the proceedings, was zealously employed in endeavors to persuade the people to elect to the convention representatives friendly to their views, and willing to support the proposition of introducing into the new Constitution a clause respecting gradual emancipation.

These efforts, as is well known, were not crowned with the desired success, the majority of the members elected being opposed to the measure. With its failure ended the political aspirations of Dr. Brown. His temper was so mild and conciliatory, and his dislike of agitation or strife so great, that he

naturally shunned party politics; and whatever may have been the motives of his engaging in the question to which reference has just been made, it does not appear that he ever after took an active part in the public questions which at different times divided and agitated the country.

Dr. Brown was elected a member of the Philosophical Society on the 18th of April, 1800, principally through the influence of Mr. Jefferson and Dr. Rush, both of whom had early discovered, and fully appreciated his scientific and literary attainments and moral worth, and entertained for him feelings of the warmest friendship. Up to that period, he had contributed little by publication to the cause of science or the arts. Some years, indeed, elapsed after his admission into the Society before he broke silence; nor did his almost constant absence from Philadelphia permit him to take part in the deliberations of that body. However, in February, 1806, he appeared in the capacity of a contributor to its Transactions. On the 18th of that month, he presented for insertion an elaborate paper, under the title of "A Description of a Cave on Crooked Creek, with Remarks and Observations on Nitre and Gunpowder." As this paper is inserted in the sixth volume of the old series of those Transactions, it is not necessary to dwell upon it in this place; but I cannot refrain from remarking that even at the present day, when sciences and arts have made so much progress, it will richly repay the trouble of a perusal.

The science and practice of medicine, as I scarcely need remark, occupied no little share of the attention of Dr. Brown. While engaged, at an early period, in the active duties of the profession in Kentucky and subsequently in New Orleans, he communicated several short essays to the editors of the "New York Medical Repository," which by them were inserted in successive numbers of that valuable periodical. Even after he had retired from practice, he neglected no opportunity of aiding in the introduction of improvements in medical and surgical matters, as also in the accessory branches, and of promoting the trial of every remedial agent or mode of practice, which

his own active and inventive mind suggested or was proposed and recommended by trustworthy observers, native or foreign. In illustration of this, it is sufficient to mention, that he endeavored to naturalize among us, with suitable modifications, Sanson and Vacca Bellingeri's recto-vesical operation for the stone; that he was among the first, if not the very first, to recommend in this country the operation of Lithotrity, which, in the hands of Civiale, Leroy D'Etiole, and other French surgeons, whose successful operations he had witnessed, was already fast supplanting, in a large number of cases, the more painful and dangerous method of Lithotomy.

With an ardor alike creditable to his heart and understanding, he sought all means, by precept and example, to sustain the dignity, vindicate the honor, and raise the status of the profession. In his lectures, in his correspondence, and in conversation with his younger brethren, he took the greatest pains to inculcate, with that power of argument, and that facility of elocution and richness of illustration for which he was distinguished, and a warmth of feeling which evinced the deep interest he took in the subject, the necessity—to say nothing of the obligation—on the part of physicians, of so conducting themselves in their intercourse with each other, as to insure the existence of a perfect harmony in the ranks of the profession; and in no case to be forgetful, in their relation with society at large, of those ethical precepts, the observance of which serve to characterize the true gentleman. He expatiated on the honor and elevated rank of our calling, pointed out how greatly it had, but too frequently, been degraded, no less in our country than elsewhere, by the unworthy conduct and ungentlemanly and vulgar deportment of some of its members, and on the obligation we were all under to effect, with the least delay possible, a reform in that respect.

With a view to insure success in this attempt—a necessity for which no one can deny existed in this country a few years ago, and more particularly at the time here referred to—Dr. Brown had recourse to an expedient, which met with the full approval of all the professional friends to whom he communi-

cated his views. I allude to the formation of an association or general medical society, intended to embrace all the leading, reputable, and influential practitioners of medicine that could be enrolled under its banners. This association he proposed to form through means of local societies established in various sections of the country. Its object was to unite its scattered members—whether residing north or south, east or west,—into a single homogeneous body, and by fostering among them reciprocity of kindly, fraternal, and honorable feelings, insure the establishment and cultivation of harmony in their ranks; while at the same time, it would, through various means, be instrumental in exciting emulation, and promoting the advancement of medical knowledge.

The society, which was originally planted in Lexington, where Dr. Brown was then attending to his professorial duties, and the existence of which was some years, for various reasons fully appreciated at the time, concealed from the public, was soon established in other places,—Philadelphia, New York, Baltimore, and other cities. Laws and regulations, framed by Dr. Brown, for the government of the entire association, were there adopted. By-laws, suited to meet special and local exigencies, were proposed. The Coan sage was with propriety selected as the patron of the body, and as a model most worthy of imitation. A promise, modelled in great measure on the celebrated oath of the father of medicine, was exacted of each member at the moment of his admission; to obtain which a unanimous vote of those present was necessary. By this promise the member bound himself to live in peace and harmony with, and to do everything honorable in his power to promote the welfare of his brethren in and out of the society, and to abide implicitly by a stringent code of ethics, that had been prepared for the guidance of the members in their intercourse with each other, and with society at large.

The local societies established in the above-mentioned places, those in Philadelphia and New York particularly, gradually acquired importance and efficiency. Their ranks filled through means of a sort of process of suction, on the part of the origi-

nal and successively elected members. In regard to the real amount of success of the association at large, or of its local branches, in the attainment of the object contemplated, it is unnecessary to enlarge in this place. But whether this success has equalled or exceeded, or whether it has fallen short of the anticipation of Dr. Brown, and those who joined him in the enterprise, it is certain, that while in a few places the results may, from a variety of unexpected influential circumstances, have been nugatory or imperfect, in many more they were of a salutary character, and were nowhere injurious. So far as the effect on the profession of Philadelphia is concerned, I have elsewhere stated some facts, which may without impropriety find a place here. Before the reforming power was made to bear on the medical men of that city, these, although inferior to none elsewhere, in point of intelligence, scientific attainment, or practical skill, so far from fraternizing together, lived in an almost constant state of warfare,—quarrelling, and even worse, was not uncommon among them, and now and then street fights occurred. This state of things gave way under the influence of the society. Soon after its establishment, harmony, comparative harmony, at least, was restored among its members, and before long, through their influence, among other medical men around them. The society did more. At its meetings much was done to excite emulation among its members, and to promote the advancement of medical science. A journal, placed under the guidance of a committee of the society, was, at the suggestion of Dr. Brown, established and continued to appear quarterly during six consecutive years.

After a prolonged existence the society closed its career, or rather ceased to hold its meetings. But the work of reform was in great measure accomplished. Peace among doctors was comparatively restored, and is now but seldom broken; and when the unwelcome event occurs, the infractor, whatever be his social or professional position, or the wrong he may have suffered, so far from eliciting the approbation of his medical brethren, is openly and decidedly censured by all. I cannot surely be wrong when I say, that the originator, organizer,

and active promoter of a plan of federation among us so complete, so harmless, and at the same time so promising of fruitful results, and which has brought forth such fruit, if not everywhere at least in some places, is entitled to the gratitude of every American physician who feels an interest in the honor and dignity of his profession.

In conclusion, it may be remarked, that a full knowledge of the character of Dr. Brown, derived from a long and intimate intercourse with him, authorizes the writer to assert with full confidence, that few individuals have presented a more rare combination of those amiable qualities, of those virtuous and cultivated feelings of the human heart, which render character estimable in life, and serve to elevate their possessor above the rest of their fellow beings. Those qualities, associated as they were in him with intellectual powers of high order, scientific and literary attainments of more than ordinary extent, as well as with great conversational talents and a happy mode of illustrating his ideas, adapted to the circumstances of the case, and the capacities and feelings of those he addressed, commanded the respect and esteem of a large circle of professional and other friends, who will long cherish the remembrance of his many virtues and services.

R. LA ROCHE.

JOHN D. GODMAN.

1794—1830.

WHATEVER difference of opinion may exist as to the essential elements of human greatness, there are a few combinations of qualities, the possession of any one of which is an undisputed passport to true distinction. An active, brilliant, vigorous intellect, a heart full of honest, noble impulses, and habits of temperance and unwearied diligence, when concentrated in the same individual, constitute a type of man rarely found, but universally acknowledged to deserve a conspicuous place in the galaxy of a country's worthies. But seldom as such a character appears in any station or calling in life, America can boast of a few such; and it is with a just pride that the medical profession can point to the names of some, whose claim to this high position cannot be wisely called in question. Among this limited number, the generation now rapidly passing away has, with one consent, conferred a fellowship upon the subject of the present brief memoir, and the writer hazards nothing in asserting that their judgment is fully approved by all who are familiar with our national scientific history.

John D. Godman was the son of Captain Samuel Godman, an officer of the Revolution, and was born at Annapolis, in the State of Maryland, on the 30th of December, 1794. Of his parents little is known, except that his mother died before he was two years old, and his father in less than three years thereafter. We are told that, "on the death of his mother, he was placed under the care of an aunt, then residing at Wilmington, in the State of Delaware; a lady, who, from the superiority of

her intellect and education, as well as the sweetness of her disposition, and her elevated piety, was eminently qualified to unfold, impress, and direct the youthful mind. Under such culture he received the first rudiments of his education, and his earliest moral impressions. His alphabet was taught him upon the knee of his grandmother, and we are told that, before he was two years old, he was able to read. When he had attained the age of four years, his aunt removed from Delaware to Chestertown, upon the Eastern Shore of Maryland, and here she placed the interesting orphan at school. He had already become the idol of the family, but now he manifested such a precocity of intellect, such a fondness for books, and such an aptitude to learn, and withal evinced so much sensibility, frankness, and sweetness of disposition, that he gained the affection and excited the admiration of all."* He thus gave indications at this early age, not only of that brilliancy of intellect which subsequently exhibited itself in such splendid colors, but also of that deepseated religious sentiment that became the governing principle of the latter years of his life.

But the favorable auspices under which his early training was begun, was destined soon to become overshadowed by the dark wings of the destroyer. At the age of six, the aunt who had watched over him so faithfully, loved him so fondly, and of whom he was heard to say on his dying bed, "If I have ever been led to do any good, it has been through the influence of her example, instruction, and prayers," was called to another world, and he was again thrown upon the charity of his friends and relatives. Who became his protector, or what special influences were brought to bear upon his mental constitution from this time until he was fifteen years of age, we are not informed. We only know that the life of dependence, to which he was obliged to submit, grated harshly upon his tender sensibilities, and somewhat marred the natural joyousness of his disposition. Some time subsequently, in a letter to a friend, he thus expressed himself in regard to this period of his exist-

* Memoir by Dr. Thomas Sewall, of Washington, D. C.

ence: "Let me now give you a retrospect of the days of my life. Since I have returned from you, I have discovered my real age, in an old book of my father's, and you would hardly suppose it,—I was twenty-one years old on the 20th day of December, 1815. Before I was two years old I was motherless; before I was five years old, I was fatherless and friendless. I have been cast among strangers; I have been deprived, by fraud, of property that was mine by right; I have eaten the bread of misery; I have drunk the cup of sorrow; I have passed the flower of my days in little better than slavery; and have arrived at what? manhood, poverty, and desolation. Heavenly Parent, teach me patience and resignation to thy will!"

In 1810, young Godman, then living in Baltimore, made the acquaintance of a gentleman, who subsequently became his benefactor and most intimate friend. This gentleman was Dr. W. N. Luckey, who was then a senior student in the office of Dr. Thomas E. Bond, of Baltimore, and who in a letter to the late Dr. Daniel Drake, relates the circumstance in the following manner. "The office"—of Dr. Bond—"was fitted up with taste; and boys, attracted by its appearance, would frequently drop in to gaze at the labelled jars and drawers. Among them I discovered one evening, an interesting lad, who was amusing himself with the manner in which his comrades pronounced the 'hard words,' with which the furniture was labelled. He appeared to be quite an adept in the Latin language. A strong curiosity prompted me to inquire, 'Who are you?' 'Don't you recollect,' said he, 'that you visited a boy at Mr. McCreery's, who had a severe attack of bilious colic?' 'I do; but what is your name, my little boy?'—He was small for his age.—'My name, sir, is John D. Godman.' 'Did you study the Latin language with Mr. McCreery?' 'No, he does not teach any but an English school.' 'Do you intend to prosecute your studies alone?' 'I do; and I will, if I live, make myself a Latin, Greek, and French scholar.'"* How fully he carried out this determination will appear in the sequel.

* Dr. Drake's Memoir.

Some time toward the close of 1811, or the early part of 1812, he was bound as an apprentice to the printer of a newspaper in Baltimore. But it may be readily imagined that, to one of such lofty aspirations and refined sensibilities, the duties of the office were far from agreeable, and the drudgery actually repugnant; which may sufficiently explain the difficulties set forth in the following paragraph, from a subsequent letter to his friend, Dr. Luckey, who was then practising his profession at Elizabethtown, Pennsylvania. "Everything is in *statu quo* with me. The same series of oppressions, impositions, and insults, are still my lot to bear. But I will not bear them long. From the oldest to the youngest, master and man, all seem to have a disposition to pick at me. You will, or may be surprised to hear, that I can never make a printer. It is an erroneous opinion of some people that no one can make a printer unless he be a scholar. On the contrary, scholars can hardly, if at all, be printers. I would not wish you to think that I count myself a scholar. On the contrary, I think myself no scholar."

It was while thus engaged in an occupation so ill suited to his tastes, so repugnant to his tender sensibilities, and so exacting upon his naturally delicate constitution, that he suffered from a train of symptoms, which were supposed at the time to be due to hypertrophy of the heart, but which may have been the first indication of that insidious malady, which, seventeen years after, brought him to a premature grave. In a letter, dated October, 1813, he says: "A continued pain in my breast, and at night, a slow but burning fever, convince me that I am travelling down a much-frequented road, to the place where disease has no effect. This, my friend, is no phantasy. I do not say it from affectation; I feel it. I cannot believe in this disease being contagious, or I should be certain that I have caught it. I sleep with a youth who was born with it, and has it fully developed."

It was during this time also that he conceived the idea of studying medicine, as we learn from the following letter to his friend, dated January, 1814: "At the suggestion of Dr. Anderson, I have determined to commence the study of chem-

istry, as he says it will be a great improvement to the mind, and more, as I may be enabled, the ensuing season, if I should live so long, to attend the lectures at the University; and it seems to run greatly in Dr. Anderson's head that I shall one day be a physician. How far this surmise may be right, time will disclose. It may, indeed, so happen; and should I study chemistry now, I shall not have it to do at a future period."

Wearied and disgusted, as he very naturally was, of standing from morning until night over a font of type, poring over the dirty and oftentimes unintelligible manuscript of newspaper scribblers, and thus wearing out both body and mind in a labor which, except so far as it kept him from immediate starvation, was every way opposed to his natural inclination and the high purposes for which his superior gifts and attainments qualified him, while at the same time it contributed to the development of the disease, the seeds of which had been already deposited in his system, we are not surprised to learn that the young printer abandoned his calling as soon as he could rid himself of his apprenticeship. How this was accomplished does not appear; but that it was effected without discredit to himself, there can be but little doubt; for we are sufficiently informed by his letters that his early moral education had, previous to this time, produced its proper influence upon his conscience, in rendering him incapable of a dishonorable act. He had already become imbued with that true wisdom of which a pure morality is the legitimate offspring, and we may rest assured that his conduct, under the present trying circumstances, was governed accordingly.

In the fall of 1814, fired by the patriotic sentiments which had already enlisted many of his comrades and acquaintances in the service of his country, then engaged at war with Great Britain, he joined the flotilla, stationed at that time in the Chesapeake Bay, under the command of Commodore Barney, and, in the capacity of a common sailor, was present at the bombardment of Fort McHenry. Quitting this, however, soon after, either from choice or in consequence of the termination

of the war, he presents himself to us again as the guest of his sister, Mrs. Stella Miller, of Baltimore; but still without the means of fulfilling the longings of his heart, to pursue the study of medicine, or even of gaining a livelihood. And now, actuated by that high sense of honor that disdained the charity of his family or friends, he is a second time about to engage himself to a newspaper publisher, again to sweat out the noble aspirations of his mind and heart over a printer's desk, from the uncongenial labor of which he had once escaped, when a letter from his friend, Dr. Luckey, animated his desires afresh, and opened the way for the gratification of his tastes. This was in the early part of the year 1815, when Dr. Luckey, already "captivated by his genius and touched by his misfortunes," resolved to invite him to his house at Elizabethtown, and afford him all the facilities in his power for studying the profession to which he aspired.

His acceptance of Dr. Luckey's generous offer is couched in the following touching and enthusiastic language, expressive of his delight and the grateful emotions with which his heart overflowed upon the reception of this unexpected pleasure: "I have this hour received your last letter, and I can assure you that language is inadequate to express to you my sincere, unfeigned joy for the pleasing news you have communicated to me. Let the manner in which these lines are penned convince you of the state of my mind at present. I was, thirty minutes before I received your letter, on the point of going to a printer in this city, to seek employment, and, but for Providence, I should have done so. You may suppose that as soon as I read your letter, I abandoned this intention and returned to my sister's house, 'with fire in each eye and paper in each hand,' to answer your epistle of friendship's own dictating. I must lay this aside until my mind becomes settled and undisturbed.

"I stopped at the line above, that I might recover a small degree of composure, in order to express myself as I ought to so good a friend. I will certainly comply with your request, should it please God to continue my health and strength, during the ensuing week. Should it please the mercy of

Providence to suffer me to take up my residence with you, I shall endeavor, by the most indefatigable study and diligence, to give you the satisfaction your kindness to me deserves. I am in hopes that I shall be able to come some day in the course of the next week ; but as my journey must be a pedestrian one, I should not wish to mention a particular day."

"On the 10th day of April, four days after the date of this letter, he arrived," says Dr. Luckey,* "at my house, and took up his residence in my family. He made his promises good, for in six weeks he had acquired more knowledge in the different departments of medical science than most students do in a year. During this short period, he not only read Chaptal, Fourcroy, Cheselden, Murray, Brown, Cullen, Rush, Sydenham, Sharp, and Cooper, but wrote annotations on each, including critical remarks on the incongruities in their reasonings. He remained with me five months, and at the end of that time you would have imagined, from his conversation, that he was an Edinburgh graduate."

These must have been glorious days in the life of our young student. After having been tossed about upon the restless sea of adversity, grasping at every object that offered the least hope of supporting him until he could reach the desired haven for which he was so manfully striving, his heavy body was now, for the first time, at rest ; while his mind, left to range at will over the fields of science, revelled in the delightful scenes that presented themselves at every step. Now the object of his heart's desire is within his grasp, and with what idolizing love he pressed it to his bosom may be learned from the assertion of his appreciating benefactor, who says of him that, "when he sat down to study, so completely was he absorbed by his subject that it seemed as though the amputation of one of his limbs would scarcely withdraw his attention."

But with such an ardent thirst for scientific knowledge, he must have soon drained the contents of the small library of a country physician of that day, and we are not at all surprised

* Dr. Drake's Memoir.

to learn that in a few short months he determined to seek more abundant sources. We can hardly believe, therefore, that the trivial incident related by Dr. Drake, in the following paragraph, was the true cause of his leaving the house of his friend.

"A circumstance, having no connection with the relation between him and his benefactor, but involving them both, led to premature separation. One or both of them were requested by the political party to which they belonged, to deliver orations on the approaching Fourth of July. Dr. Luckey began at the appointed hour, and went through with his discourse, but attempts were made by the opposite party to offer insult and create disturbance; at which our young orator became indignant, and yielding to the impulse of his strong native feeling, not only refused to deliver what he had prepared, but resolved on returning forthwith to Baltimore. His oration was left with his preceptor, who speaks of it as not unworthy of a Patrick Henry."

Returning to Baltimore he became a pupil of Dr. Hall of that city, and the succeeding autumn entered upon the course of medical lectures in the University of Maryland; but it would seem that, in consequence of pecuniary difficulties, his purposes were again thwarted. In the ensuing February—1816—he wrote to his benefactor in the following eloquent and affecting style:

"Need I then inform you how high my expectations were raised, when I commenced attending the lectures this winter; need I say I was almost certain of future competency? Alas, my friend, the Great Ruler of events, has interposed, in order to teach new resignation to his will, this heavy disappointment. By unforeseen events, by domestic calamities, I have been compelled to relinquish the study of medicine, so long the ultimatum of all my hopes. FATHER OF ALL, THY WILL BE DONE. I have made this my motto, my consolation, and did I not daily see the truth of '*Omnia pro optimo*,' I might, perhaps, repine. I am now in expectation of a situation with an emi-

nent apothecary of this city, and I may be enabled at a future period, to recommence the study of medicine."

The expected situation, however, he did not obtain; but by some means or other he was enabled to resume the study of medicine; for, on the 18th of April of the same year, he wrote to Dr. Luckey: "I still continue to study with Dr. Knight—the partner of Dr. Davidge—and provided it shall be the will of heaven, I may possibly procure admission, in the course of the next year, into the venerable circle of medicine."

Under the direction of, and in all probability, by the friendly interposition of Dr. Davidge, he prosecuted his studies, and "with such diligence and zeal," says Dr. Sewall, "as to furnish, even at that early period, strong intimations of his future eminence. So indefatigable was he in the acquisition of knowledge that he left no opportunity of advancement unimproved; and, notwithstanding the deficiencies of his preparatory education, he pressed forward with an energy and perseverance that enabled him not only to rival but to surpass all his fellows."

He attended the lectures in the Medical Department of the University of Maryland, during the two succeeding winters, under the pupilage of his new friend, Professor Davidge, and was graduated at the commencement in the spring of 1818. During the last session of his attendance, a circumstance occurred which is well worthy of being mentioned here, as illustrating his high standing in the class, and the confidence which the faculty of the institution placed in his abilities. Dr. Davidge, who was the Professor of Anatomy, having met with an accident by which his thigh-bone was broken, was prevented from attending to his professional duties for several weeks, and in the meantime it became necessary to provide a temporary substitute. The faculty with one accord selected Mr. Godman, who, confident of his own attainments and of his ability to make a lecturer, having already acted as a demonstrator in the dissecting-rooms, consented to fulfil the appointment, and such was the enthusiasm and eloquence of his delivery, the clearness and simplicity of his style, the forcible appositiveness of his illustrations, and, withal, the modesty and propriety of his deportment, that he

won the applause and commendation of all who heard him. When he came to be examined for his degree, "the superiority of his mind, as well as the extent and accuracy of his knowledge were so apparent, that he was marked by the professors as one who was destined at some future period to confer high honor upon the profession."*

Confessedly the most important and interesting period in the life of a young man, who has studied a profession, is that at which the degree, whether it be of medicine, law, or divinity, is conferred upon him. It is then that his friends look upon him with emotions of unusual pleasure and anxiety; gratified that he has thus far succeeded in the calling of his choice, but anxious, lest contented with his attainments, he may turn aside into the paths of idleness, or seek others leading away from that upon which he has already made satisfactory progress. How many there are, especially among those upon whom Providence has bestowed intellectual gifts of a superior order, who having reached this point with the highest honor, and given promise of a career of great distinction and usefulness, suddenly stop short, and either sink into insignificance, or, what is worse, become as notorious in some vicious pursuit as they were for a while distinguished in their endeavors after knowledge. Such was not the case with the subject of this narrative. The period of his graduation in medicine was not a turning-point in his life, but only a mile-stone upon that road to eminence which he continued subsequently to tread with such rapid strides.

Another point in this connection is worthy of notice. It might be supposed from the preceding account of Dr. Godman's trials and privations, that he entered upon the study of medicine without any more preparatory education than what he might have picked up during the few years of schooling which he enjoyed when a boy, as is unfortunately the case with so many young men who apply for and gain admission into our medical colleges. But this is very far from being

* Memoir Introductory Lecture, by Thomas Sewall, M.D., published by the American Tract Society, 1830.

true, for, notwithstanding the many and serious disadvantages under which he labored, he had succeeded, by dint of indomitable perseverance, backed by a high appreciation of the qualifications necessary to enable him thoroughly to grasp the recondite truths of medical science, in making himself an excellent scholar. "In this respect he was a shining example; and his subsequent success should animate every friendless young man, who may engage in the study of medicine, to imitate his industry and unfaltering perseverance. By these means, if not blessed with his genius, he may prepare himself for extensive usefulness, and earn respectability, if not renown."*

Destitute of the means necessary to enable him to wait the slow course of professional business in a city where, doubtless, he would have much preferred to remain, Dr. Godman proceeded to the country, and became a candidate for practice in the village of New Holland, State of Maryland, whence, however, he removed in a few months to the banks of the Patapsco, not far from Baltimore. Here he succeeded in obtaining business, and here, also, he made those observations in natural history, which became some years subsequently the basis of a series of popular papers entitled "Rambles of a Naturalist." "But his ardent temperament was little adapted to the stagnant existence of a village doctor. He thirsted for competition, and longed to engage in the rivalries which prevail among the candidates for fame. Nature seems to have urged him on. It was she who revealed to him the compass of his intellectual powers; and bid him seek a theatre commensurate with their efficiency."† He looked with eager anticipation upon the time when he should have an opportunity of employing his talents as a public teacher of anatomy, and had no little expectation of being called to the University of Maryland, to occupy, as a professor, the place which he had temporarily filled during the last course of lectures that he attended. But being disappointed in this latter, he boldly resolved to remove to Philadelphia, then, as still, the emporium of medical teaching in this

* Dr. Drake's Memoir.

† Ib.

country, and the Mecca of all his hopes and aspirations, there to strike out upon his individual account as a lecturer upon anatomy and physiology. But he had hardly taken up his residence there, and begun to attract the attention which his talents almost immediately elicited, when he was solicited by the late Dr. Drake, who was then in search of men of ability, to complete the organization of the Faculty of the Medical College of Ohio, to accept the professorship of surgery in that institution, the first session of which had closed a few months previously. To this he consented, and on the 6th of October, of the same year, 1821, being his wedding-day,* he left Philadelphia, and after a tedious journey of two or three weeks, arrived at Cincinnati just in time to enter upon his professional duties.

Looking back from this distant day at the then apparently poor prospects of the Medical College of Ohio, and the comparatively little fitness of Dr. Godman for the chair which he was called to fill, this seems to me at first thought to have been an exceedingly ill-judged move. But, on the other hand, it must be taken into account that his ambition to become a public teacher, was second only to his insatiate thirst for knowledge; that he possessed a thorough acquaintance with the leading principles of medicine; that he was admirably versed in the subject of anatomy, with which surgery has so close a connection; that the only other medical school then in operation in the great West, was the one at Lexington, Kentucky; that Cincinnati, although containing but about ten thousand inhabitants, was the largest city west of the Alleghenies; and that the probability of his getting rapidly into practice was far greater than it would have been in Philadelphia, or any of the other older settled cities of the East. Such, doubtless, were the arguments which influenced him to emigrate to Cincinnati; but the sequel, while it did not disprove their cogency, proved to him an unfortunate experience.

* Dr. Godman married a daughter of the distinguished artist, Peale. She survived him many years, never ceased to mourn his untimely death, and lived in confident and joyful expectation of meeting him in heaven.

Indeed, he may be ranked among the first victims to the remarkable ill-success which befell nearly all those who were about that time, and subsequently, persuaded to leave their eastern homes, to join the illustrious Drake in his attempts to build up the Medical College of Ohio. Scarcely had he delivered his introductory address, when he was compelled to resign his appointment, and thus to abandon the principal object which he had in view in leaving Philadelphia. Of the precise causes which led him to take this step we have no definite information, but only the simple statement of Dr. Drake, that "difficulties of which he was neither the cause nor the victim were generated in the faculty; the class was small, and the prospects of the institution overcast."

Although again foiled in his efforts to secure an official position, commensurate with his talents as a public teacher, and the pecuniary wants of his family, Dr. Godman was not the man to succumb under such adverse circumstances. His ascent up the precipitous and rugged hill, upon which the temple of fame is said to stand, was not thus to be prevented, and hardly had the last lightly-rooted shrub given way beneath his weight, before we find him again upon his feet, struggling up another pathway, and with undiminished strength, seizing upon other objects, which promised a more secure hold. Disappointed and thwarted by the failure of the Medical College, he engaged immediately in the establishment of a medical journal, and the "Western Quarterly Reporter," the first periodical of the kind west of the Alleghanies, was the result of his enterprise. It may be true that he was not the originator of this scheme, the credit of which is ascribed to his friend, Dr. Drake, but the labor of having carried it into execution was certainly his, as the pages of the "Reporter" amply attest. But alas! for his hopes, he could not have laid hold of a weaker support. Medical journalism was then, as it has ever since proved to be, in this country, the least profitable investment of talent, labor, or money, within the range of a professional man's pursuit, and we are not at all surprised to learn that, after the issue of six numbers, the enterprise was abandoned.

Notwithstanding the brief existence of the "Reporter," its establishment under the existing circumstances, is sufficient evidence to those who are familiar with such labors, of a degree of energy on the part of the editor, almost unparalleled in the history of medical journalism, either in this or any other country; and the signal ability with which it was conducted, is hardly equalled by any of the thirty or forty similar periodicals, with which American medical literature is at present supplied. In looking over its pages, one is absolutely astonished at the great literary merit and intrinsic value of its contents; and some idea of the enormous labor bestowed upon it by Dr. Godman, may be gained from the statement, that more than three hundred pages of its contents were contributed by his own pen. Of these contributions, many were of an ethical nature, relating to medical education, medical quarrels, medical excellence, medical duties, &c.; others of a purely scientific character, and quite a number reviews of medical works; any one of which would command attention in journals of the present day.

Dr. Godman did not remain in Cincinnati until the suspension of the "Reporter," but impelled by the same high ambition which had led him from the banks of the Patapsco to Philadelphia, and from the latter city to the banks of the Ohio, he retraced his steps to Philadelphia, in the autumn of 1822, having resided in the West but a single year. During this brief period, however, he had not only accomplished the work above alluded to, and attended to his practice, which is said to have been considerable for a stranger, but occupied himself with many other less important objects, bearing upon the good of the profession, or his own individual improvement. Among other things it is mentioned that "he erected an apparatus for sulphurous fumigation, and translated and published a French pamphlet on that remedy; he read many medical books, and current works of general literature; prosecuted the study of the German and Spanish languages; and labelled the ancient coins and medals in the Western Museum. In the midst of the whole, he also found time to cultivate his social

relations, and every day added a new friend to the catalogue of those who loved him for his simplicity and frankness, not less than they admired him for his genius, vivacity, and diligence."*

In October, 1822, Dr. Godman, with his wife and infant child, bid farewell to the West, and set out to retrace his steps across the mountains. The journey was a long and tedious one, performed entirely by stage, and in a letter written on the road, he characterizes it as exceeding in misery, any twenty journeys that he had ever before undertaken. He arrived in Philadelphia, the theatre of his future renown, just as the medical students were assembling for the annual course of lectures in the University of Pennsylvania, then the only medical school in the city. Having no time to lose, he went immediately to work, to provide himself with the means for establishing himself as a private lecturer upon anatomy and physiology. For this purpose, he hired the rooms in College Avenue, which had been previously occupied for one or two years, by Dr. Jason Lawrence, and which have ever since his time, been devoted to the same objects by various gentlemen, many of whom have become well known to the profession, as men of science, and teachers of great ability. Here he commenced lecturing, and in a few weeks, his eloquence as a speaker, his great powers as a delineator of the subjects which he undertook to teach, and his winning manners as a companion, attracted large numbers, not only of students of medicine, but of others not directly interested in medical studies. His talents, indeed, soon became the theme of remark throughout the numerous circles of scientific and literary men, of which Philadelphia has had such good reason to be proud for the last half century, and requisitions were frequently made upon him for addresses, before various professional and non-professional assemblies. Never, however, so far as I am informed, did he condescend to anything like a political harangue; for, notwithstanding the fervid patriotism which he exhibited, whenever occasion oc-

* Dr. Drake, *Op. cit.*

curred to call it forth, he seems to have lived above even the knowledge of the tricks and slips of party demagogues. Whenever he consented to appear before public audiences, which he not unfrequently did, the subjects which he selected for discussion, were almost invariably of a scientific character, and thus while those who crowded to hear him, were entertained by the display of his brilliant imagination, deep enthusiasm, and graceful delivery, they never failed to receive more or less valuable instruction. In the addresses which he delivered about this time, and which were collected and published in a volume some years afterwards, will be found some specimens of his eloquence as a speaker, and skill as a reasoner, which clearly evince the remarkable talent with which he was gifted.

It was not, however, to private instruction or public lecturing that Dr. Godman devoted his whole time, exacting as these duties were. During the four years in which he occupied the rooms in College Avenue, he made many contributions to anatomical science, and more especially to surgical anatomy, most of which were published in the "Philadelphia Journal of the Medical Sciences." Of this periodical, he afterwards, in 1824, became one of the editors, and continued to use his pen for its support, to within a short time of his death. His more elaborate anatomical investigations, comprising a minute account of the connections and distribution of the various fasciæ of the human body, were published in a separate volume, given to the profession in 1824. He also issued a tract of eighty-six pages, entitled "Contributions to Physiological and Pathological Anatomy, made at the Philadelphia Anatomical Rooms, during the winter of 1824-5."

But by his removal to Philadelphia, a still wider field for research was opened before him. Since his first settlement upon the banks of the Patapsco, he had employed every suitable opportunity for cultivating a practical acquaintance with general natural history, and had already become proficient in many of its branches; but here, through the Academy of Natural Sciences, of which he had been made a member before his

departure for the West, he was enabled to extend his investigations, and soon conceived the idea of writing a book upon the subject, which should be the crowning labor of his life. By the most indefatigable industry and perseverance this was accomplished, and in 1826, appeared his "American Natural History," in three octavo volumes, a work which, considering the circumstances under which it was produced, is at once a valuable addition to the scientific literature of the country, and a worthy monument to his memory.

In addition to his strictly scientific labors, which, in viewing what he accomplished, one would suppose must have occupied every moment of his working hours, Dr. Godman dipped somewhat into general literature, and wrote several elaborate analytical and critical reviews for the "American Quarterly," and translated and published a number of papers from the Latin, French, and German languages, among which were Lavasseur's "Narrative of Lafayette's Visit to the United States."

Such was the life of incessant toil that he was leading in Philadelphia, a sacrifice of mind and body which met with but little recompense in a pecuniary point of view, when he was called to the professorship of anatomy in Rutgers' College, in the city of New York. The office was one of honor; the school, boasting among other well-known names upon its list of lecturers, those of Mott and Hosack, promised to obtain a rapid success. Having consented to the appointment, he went to New York in the fall of 1826, and lectured, with almost unparalleled popularity, during the ensuing winter. He also became a candidate for practice; but, considering his devotion to pursuits which ill fitted him to compete for popular favor of this sort, it does not seem likely that he obtained much encouragement. The following winter, his health, which had been declining for some time previous, became so much impaired that he was obliged to quit about the middle of the course, and resign his chair. Being advised to leave New York for a warmer latitude, he went to Santa Cruz, where he remained during February, March, and April, and returned to

Philadelphia in May, after a rather unpleasant and, so far as his health was concerned, an unsatisfactory visit. Convinced now that he was in the advanced stages of consumption, he did not attempt—indeed, being reduced to a mere skeleton he was physically unable—to resume his anatomical labors, but taking a house at Germantown, he continued to labor with his pen for the support of his family. It was here, while for most of the time unable to leave his room and often too weak to sit up, that he wrote for "The Friend," a weekly magazine, published at Philadelphia, those delightful letters entitled "Rambles of a Naturalist." These were subsequently collected, and published in Waldie's "Select Circulating Library," but after the author's death were issued in an independent 12mo. volume, edited by Dr. Reynell Coates, and prefaced by a memoir taken from the "Western Journal of the Medical and Physical Sciences," for which it had been prepared by the editor, Dr. Daniel Drake. Dr. Godman also continued to work for the "Encyclopædia Americana," the natural history department of which had been exclusively confided to him, but which he did not live to complete. In this condition, he passed nearly two years; occasionally able to go out and enjoy the sunshine and the landscape, which to his genial heart seemed so bright and green, but for most of the time confined to the house, husbanding his strength for the performance of those labors upon which the daily bread of his family depended. But, with all the appliances which science and art could suggest or contrive, the unremitting attentions of his friends, of whom Dr. Samuel Jackson seems to have been the most devoted, and the affectionate nursing of his attached wife, his disease made steady inroads. During this period, he was fully aware that his end was not far off, and often thought it immediately at hand, but never once did he repine or complain. Throughout the whole of his sickness, he maintained a remarkably cheerful frame of mind, and would not permit any exhibition of sadness in his chamber. On the 17th day of April, 1880, he commended his family to the Father of mercies, and calmly resigned himself into the hands of the Saviour in whom he trusted, and

"thus fell from the firmament of the American profession, before he had reached his meridian splendor, one of the brightest stars which have yet risen above its horizon."

Of the numerous salient points presented in the life and character of Dr. Godman, that which stands out with probably more prominence than any other was his inordinate thirst for knowledge. This showed itself in his childhood, seemed to "grow with his growth and strengthen with his strength," and was as manifest during the long days of his last illness,—days which he felt to be his last,—as it was when, with elastic step of conjoined youth and vigorous health, he scoured the country in pursuit of objects of natural history. Such was his intense craving, that nothing seemed to satisfy him. Although human anatomy and general zoology were his favorite studies, yet he took in, with almost equal avidity, physiology, pathology, and the other branches of medicine; became proficient in several modern and ancient languages; prosecuted extensive and diversified researches into the natural sciences; made himself thoroughly acquainted with general history, and acquired a knowledge of the fine arts beyond that usually possessed by those more immediately interested in such matters. In the pursuit of any one or other of these subjects, his eagerness knew no limits; day and night, winter and summer, alone in the wide world or oppressed by the cares of a family, he knew no rest, variety of occupation being the only relaxation which he sought or desired.

It was not, however, for a selfish, miserly purpose that he accumulated stores of knowledge with such eagerness, and much less was it for the gratification of a variety of learning. He seemed to love truth for truth's sake; and, while he was ever ready and willing to impart it to others, he did not attempt to make a display of it for the purpose of applause, but preferred rather to pass for a student even among those whom he essayed to teach.

As a lecturer, he was unusually gifted. His style was easy and natural; his diction simple, but choice and graceful; his powers of illustration remarkably quick and accurate; and the

fervor with which he always delivered his prelections was sure to win the attention of his auditors, whatever the subject in hand might be. Added to these qualities, he possessed a countenance full of interest, and capable of strong and varied expression, and a voice of wonderful melody and flexibility. In lecturing upon his favorite branch, human anatomy, he seemed to comprehend precisely what were the wants of those who were just beginning the study, and he was the first and only man in this country who has ever been able successfully to carry on his dissections in the presence of his class, without interruption to the continuance and integrity of his lecture. This he always contended to be the only true method of teaching anatomy in the amphitheatre; and with his happily constituted powers of description, and his great aptitude in handling the scalpel, the superiority of the plan was clearly demonstrated, however awkward and tedious such a course might seem when attempted by almost any one else.

In his intercourse with society, he was characterized by great frankness and honesty of purpose, conjoined with a suavity of manner, which captivated every one with whom he was brought in contact; and the close attachment of the numerous friends who enjoyed his intimacy is a sufficient evidence of his sincerity and uprightness of heart.

As a Christian, he illustrated, both in his walk and conversation, the truth of those doctrines which he had received in early youth, and of which, at the age of maturity, his mind more fully approved. It is true that, at one period of his life, his mind was much disturbed with doubts and fears, and for a time he seemed to be groping in the darkness and uncertainty of materialism; but again, some time before his death, the clouds dispersed, and he stood forth as a bold and cheerful witness to the truth as it is in Jesus, testifying before all who visited him in his sick chamber to the inestimable value of the Christian's hope.

T. G. RICHARDSON.

SAMUEL LATHAM MITCHILL.

1764—1831.

THIS distinguished individual, so long and familiarly known to the citizens of the United States, and so highly appreciated by the enlightened of Europe, merits a record of his character and labors, as the pioneer philosopher in the promotion of natural science and medicine in America.

Samuel L. Mitchill was born in North Hempstead, formerly Plandome, Queen's County, Long Island, New York, on the 20th of August, 1764. In this village, his father, Robert Mitchill, of English descent, was an industrious farmer, of the Society of Friends. He died in 1789, leaving behind him six sons and two daughters, most of whom he lived to see respectably settled in life. Samuel was the third son, who was remarkable for those habits of observation and reflection which were destined to elevate him to an enviable distinction among his contemporaries; and, fortunately for mankind, his talents and laudable ambition met a discerning and liberal patron in his maternal uncle, Dr. Samuel Latham, a skilful and intelligent medical practitioner in his native village. Young Mitchill received his classical education under the direction of the learned and accomplished Dr. Leonard Cutting; the elementary principles of medicine under his uncle Latham; and completed his professional studies in New York, with the erudite Dr. Samuel Bard, with whom he continued three years—a devoted pupil.

The condition of affairs in New York, owing to the occurrences of the revolutionary contest, and the occupancy of this

city by the British, led young Mitchill to avail himself of the advantages held out by the University of Edinburgh, where he arrived in 1783, and which was at that time adorned by the talents of Cullen, Black, Duncan, and Monro. Here he enjoyed the gratifying intercourse of many remarkable students, and among his fellow-companions were the late Sir James Mackintosh; the excellent Dr. Caspar Wistar; Richard S. Kissam, the popular surgeon; William Hammersly, long a professor in Columbia College; and Thomas Addis Emmet, still so well remembered as pre-eminent at the New York Bar.

Upon his return to his native country, the young physician, richly laden with stores of professional and general information, devoted a portion of his leisure to acquire a knowledge of the laws and Constitution of the Republic, under the direction of Robert Yates, at that time Chief Justice of the State of New York. His medical career, his professional labors, and his contributions towards the natural history and science of his country, will be best comprehended by those who investigate the progress those departments of knowledge have made in this country.

The universal praise, says "Old New York,"* which Dr. Mitchill enjoyed in almost every part of the globe where science is cultivated, during a long life, is demonstrative that his merits were of a high order. A discourse might be delivered on the variety and extent of his services in the cause of learning and humanity. Dr. Mitchill's character had many peculiarities; his knowledge was diversified and most extensive, if not always profound. Like most of our sex, he was married, but, as old Fuller would say, the only issues of his body were the products of his brain. He advanced the scientific reputation of New York by his early promulgation, when first appointed professor in Columbia College, of the Lavoisierian system of chemistry. His first scientific paper was an essay on Evaporation; his mineralogical survey of New York, in 1797, gave Volney many hints; his analysis of the Saratoga waters enhanced the importance of these mineral springs.

* Old New York; or, Reminiscences of the past Sixty Years. New York. 12mo. 1858.

About this time, he published "An Account of the State of Learning in Columbia College." His ingenious theory of the doctrine of septon and septic acid gave origin to many papers, and impulse to Sir Humphrey Davy's vast discoveries; his doctrines on pestilence awakened inquiry from every class of observers throughout the Union; his expositions of a theory of the earth and solar system captivated minds of the highest qualities. His speculations on the phosphorescence of the waters of the ocean, on the fecundity of fish, on the decortication of fruit trees, on the anatomy and physiology of the shark, swelled the mystery of his diversified knowledge. His correspondence with Priestley is an example of the delicious manner in which argument can be conducted in philosophical discussion. His elaborate account of the fishes of our fresh and salt waters adjacent to New York, comprising 166 species, afterwards enlarged, invoked the plaudits of Cuvier. His reflections on somnium—the case of Rachel Baker—evinced psychological views of original combination. His numerous papers on natural history enriched the annals of the Lyceum, of which he was long President. His researches on the ethnological characteristics of the red man of America betrayed the benevolence of his nature and his generous spirit. His fanciful article, "Fredonia," intended for a new and more appropriate geographical designation for the United States, was at one period a topic which enlisted a voluminous correspondence, now printed in the proceedings of the New York Historical Society.

He increased our knowledge of the vegetable *materia medica* of the United States, and he wrote largely on the subject to Barton of Philadelphia, Cutler of Massachusetts, Darlington of Pennsylvania, and Ramsey of South Carolina. He introduced into practice the *sessamum orientale*. He wrote amply to Percival of Manchester, and to other philosophers in Europe, on noxious agents. He largely seconded the views of Judge Peters, on gypsum as a fertilizer. He cheered Fulton when he was dejected; encouraged Livingston in appropriation; awakened new zeal in Wilson, when Tompkins, the Governor of the State, had nigh paralyzed him by his

frigid and unfeeling reception; and with John Pintard, Cadwallader D. Colden, and Thomas Eddy, was a zealous promoter of that system of internal improvement which has stamped immortality on the name of Clinton. He co-operated with Jonathan Williams in furtherance of the Military Academy at West Point; and, for a long series of years, was an important Professor of Agriculture and Chemistry, in Columbia College, and of Natural History, Botany, and Materia Medica, in the College of Physicians and Surgeons, of New York. His letters to Tilloch, of London, on the progress of his mind in the investigation of septic acid—oxygenated azote—is curious as a physiological document. Many of the leading papers from his pen are to be found in the "London Philosophical Magazine," and in the "New York Medical Repository," a journal of wide renown, which he established with Miller and Smith; yet he wrote in the "American Medical and Philosophical Register," the "New York Medical and Physical Journal," the "American Mineralogical Journal," of Bruce, the "Transactions of the Philosophical Society of Philadelphia," and supplied several other periodicals, both abroad and at home, with the results of his cogitations. He accompanied Fulton on his first voyage in a steamboat, in August, 1807; and, with Williamson and Hosack, he organized the Literary and Philosophical Society of New York, in 1814. He was associated with Griscom, Eddy, Colden, Gerard, and Wood, in the establishment of the Institution for the Deaf and Dumb; and, with Eddy and Hosack, may be classed with the first in this city in respect to time, who held converse with the afflicted mute by means of signs. With Dr. Townsend and Sylvanus Miller, he disinterred a mammoth, at the Walkill, in Orange County, in 1818; and constituted a prominent member of a convention held at Philadelphia, in 1819, for preparing a National Pharmacoposia.

He was one of the commissioners appointed by the general government for the construction of a new naval force, to be propelled by steam,—the steamer "Fulton the First." While he was a member of the United States Senate, he was un-

wearied in effecting the adoption of improved quarantine laws, and aided Dr. Richard Bayley in the undertaking; and, among his other acts important to the public weal, was strenuous to lessen the duties on the importation of rags, in order to render the manufacture of paper cheaper, the better to aid the diffusion of knowledge by printing.

There was a rare union in Dr. Mitchill of a mind of vast and multifarious knowledge and of poetic imagery. Even in his "Epistles to his Lady Love," the excellent lady who became his endeared wife, he gave utterance of his emotions in tuneful numbers, and likened his condition unto that of the dove, with trepidation seeking safety in the ark. The specimens of his poetic talents given in the Messrs. Duyckinck's "Cyclopædia of American Literature," are a fair representation of his metrical genius. He was tinctured with the Rosa Matilda style, and adored Darwin. The epistle to that philosopher, by Dr. Smith, was blended with the intellectual elaborations of Dr. Mitchill, and demonstrates, like his versification of the piscatory eclogues of Sannazarius, how deeply devoted he was to the simple and the effective. De Witt Clinton, his admirer, caused him to add to the numbers of his special translations of the Neapolitan bard; and I am ready to admit that Mitchill equalled in harmony and in manner, the once highly estimated piscatorial poetry of Moses Brown, who, in 1778, had published his "Angling Sports," in nine eclogues. Dr. Mitchill's translations of our Indian War songs gave him increased celebrity; and I believe he was admitted, for this generous service, an associate of their tribes. The Mohawks had received him into their fraternity at the time when he was with the commission at the treaty of Fort Stanwix.

I was repeatedly curious enough to interrogate him as to the question, what agency he had had in the modification of the New England Primer, and whether, at his suggestion, the old poetry, "Whales in the sea God's voice obey," had been transformed into the equally sonorous lines, "By Washington great deeds were done." In one of my morning visits to him, at his residence in White Street, about the time that Jeffrey,

the celebrated Edinburgh critic, had called upon him, to take the dimensions of a universal philosopher, the learned Doctor was engaged in writing a series of minor poems for the nursery; for his nursery literature, like his knowledge of botanical writers, had scarcely any limitation. "You are acquainted," says he, "with the nursery rhymes commencing 'Four-and-twenty blackbirds?' They abound with errors," added he, "and the infantile mind is led astray by the acquisition of such verses. I have thus altered them this morning: 'When the pie was opened, the birds they were songless; was not that a pretty dish to set before the Congress?' I thus correct," added the Doctor, "the error that might be imbibed in infancy of the musical functions of cooked birds; and while I discard the King of Great Britain, with whom we have nothing to do, I give them some knowledge of our general government, by specifying our Congress." These trifles show how intense was his Americanism. When he declared, in his ingenious effusion on "Freedom and Fredonia,"

"Not Plato in his Phædon,
Excels the Chief of Fredon,"

his democracy and his admiration of the philosopher Jefferson, then President, was complete.

Ancient and modern languages were unlocked to him, and a wide range of physical science, the pabulum of his intellectual repast. An essay on composts, a tractate on the deaf and dumb, verses to septon, or to the Indian tribes, might be eliminated from his mental alembic within the compass of a few hours. He was now engaged with the anatomy of the egg, and now deciphering a Babylonian brick; now involved in the nature of meteoric stones; now in the different species of brassica; now in the evaporation of fresh water; now in that of salt; now scrutinizing the geology of Niagara; now anatomizing the tortoise; now offering suggestions to Garnet, of New Jersey, the correspondent of Mark Akenside, on the angle of the windmill; and now concurring with Michaux on the beauty

of the black walnut as ornamental for parlor furniture; now, with his conchological friend, Akerly, in the investigation of bivalves; and now with the learned Jewish Rabbi, Gershom Seixas, in exegetical disquisitions on Kennicott's Hebrew Bible. Now he might be waited upon by the indigent philosopher, Christopher Colles, to countenance his measures for the introduction of the Bronx River into the city; and now a committee of soap-boilers might seek after him, to defend the innoxious influence of their vocation in a crowded population. For his services in this cause of the chandlers, Chancellor Livingston assured him, doubtless facetiously, by letter, that he deserved a monument of hard soap; while Mitchill, in return, complimented Livingston, for his introduction of the merino sheep, as chief of the Argonauts. In the morning he might be found composing songs for the nursery; at noon dietetically experimenting and writing on fishes, or unfolding to admiration a new theory on terrene formations; and at evening addressing his fair readers on the healthy influence of the alkalies, and the depurating virtues of whitewashing.

At his country retreat, at Plandome, he might find full employment in translating, for his mental diversion, Lancisi, on the fens and marshes of Rome, or in rendering into English poetry the piscatory eclogues of Sannazarius. One day, in workmanlike dress, he might have been engaged, with his friend, Elihu H. Smith, on the natural history of the American elk, or perplexed as to the alimentary nature of tadpoles, on which, according to Noah Webster, the people of Vermont almost fattened, during a season of scarcity; another, attired in the costume of a native of the Feejee Islands,—for presents were sent him from all quarters of the globe,—he was better accoutred for illustration, and for the reception, at his house, of a meeting of his philosophical acquaintances; while again, in the scholastic robes of an LL.D., he would grace the exercises of a college commencement.

I have but imperfectly glanced at the literary and scientific writings of Dr. Mitchill: they are too numerous to be noticed

at length, on this occasion. To others must be assigned that duty. His detailed narrative of the earthquakes, which occurred on the 16th day of December, 1811, and which agitated the parts of North America that lie between the Atlantic Ocean and Louisiana, and of subsequent occurrences of a like nature, is a record of physical phenomena well worthy the notice of our Storm King, Mr. Merriam, and others, but which seem to have escaped the attention even of our distinguished philosopher, Dr. Maury, the famed author of the *Physical Geography of the Sea*. This elaborate paper of Dr. Mitchill is to be found in the *Transactions of the New York Literary and Philosophical Society*, 4to, vol. i, pp. 281-310.

Of Dr. Mitchill's collegiate labors in the several branches of knowledge, which he taught for almost forty years, I shall assume the privilege of saying a few words. His appearance before his class was that of an earnest instructor, ready to impart the stores of his accumulated wisdom for the benefit of his pupils, while his oral disquisitions were perpetually enlivened with novel and ingenious observations. Chemistry, which first engaged his capacious mind, was rendered the more captivating by his endeavors to improve the nomenclature of the French savans, and to render the science subservient to the useful purposes of agriculture, art, and hygiene. In treating of the *materia medica*, he delighted to dwell on the riches of our native products for the art of healing, and he sustained an enormous correspondence throughout the land, in order to add to his own practical observations the experience of the competent, the better to prefer the claims of our indigenous products.

As a physician of that renowned institution, the New York Hospital, he never omitted, when the opportunity presented, to employ the results of his investigations for clinical appliances. The simplicity of his prescriptions often provoked a smile on the part of his students, while he was acknowledged a sound physician at the bedside. His anecdotal remarks on the theories and systems at once declared that he was fully apprised of previous therapeutical means, from the deductions of Hippocrates and Pliny, Boerhaave and Hoffman, to the fan-

ciful speculations of Brown and Darwin. He was filled with the precepts of the Salernian code. But his great forte was natural history. Here his expositions of that vast science, in its several ramifications, gave the best proofs of his capacious stores of bookish wisdom and personal knowledge. He may fairly be pronounced the pioneer investigator of geological science among us, preceding McClure by several years. He was early led to give his countenance to the solidity of the Wernerian theory, but had occasion to announce his belief, from subsequent investigation in after life, that the Huttonian system was not wholly without facts deduced from certain phenomena in this country. His first course of lectures on natural history, including geology, mineralogy, zoology, ichthyology, and botany, was delivered, *in extenso*, in the College of Physicians and Surgeons, in 1811, before a gratified audience, who recognized in the professor a teacher of rare attainments and of singular tact in unfolding complex knowledge with analytic power. Few left the lectures without the conviction that an able expositor had enlisted their attention. He in fact was a great teacher in that faculty which included Hosack, Post, Macneven and Mott. There was a wholesome natural theology, blended somewhat after the manner of Paley, with his prelections, and an abundance of patriotism, associated with every rich specimen of native mineral wealth. It would have proved difficult for him to have found adequate language to express his gratification at the present day, of our California treasures. His manner throughout, as an instructor, was calculated to attract the attention of the students by his intelligible language and pleasing elucidations. His confidence in his expositions was not always permanent—new facts often led to new opinions—but the uncertainties of geological doctrines, not yet removed, gave him sometimes more freedom of expression than rigid induction might justify; and when he affirmed as his belief that the American continent was the Old World, and that the Garden of Eden might have originally been located in Onondaga Hollow, he imposed a tax on credulity too onerous to bear. Jefferson, indeed, considered the red men of America

of more remote antiquity than those of Asia; and the Abbé Clavigero thought that the first American people descended from different families after the confusion of tongues. In contemplating his investigations on fishes, Mitchill thought he had enlarged the boundaries of science, and his exclamation, "Show me a scale, and I will point out the fish!" was not thought too hyperbolic for his scholars. But even in the warmth of such utterance, he did not outvie the assertion of John Bell, the great surgeon of Edinburgh, who, in a conversation I held with him on American natural history, affirmed that, with a mammoth bone, he could form a new theory of the earth.

For more than a score of years it was my lot to be associated in collegiate labors with this renowned man, and I may be pardoned if my remarks are of some length on the professorial career of this American philosopher.

Pages might be appropriated to a record of his various occupations with men of all ranks and of every profession. His popular address; his unpretending demeanor; his cordial feelings to advance the interests of all classes, blended with his well-known and acknowledged merits, constituted him an oracle among his fellow-citizens. He held converse with the way-faring man; could amuse an old soldier by the recital of martial deeds, and excite the admiration of a Radcliffian professor of philosophy. Almost every projector of a new device sought his judgment and asked his decision. This was in an especial manner the case with artists and mechanical men. Some new American pigment; some modification of a gridiron; some newly-devised rudder, was sure to summons the Doctor's artistic or practical powers; and scarcely an indigenous author sprung up, who was willing to overlook him, without first securing his approbation to his yet unfledged thoughts. Anomalous products in creation; monstrous formations in animality; hybrid plants; literary curiosities of remote nations; Indian hieroglyphics and illustrations of Indian mounds,—all were subjected to his critical knowledge for opinion. His personal acquaintance with authors, travellers, and particularly naturalists, was almost unbounded, and among those of this

last designation, Bartram, of Pennsylvania, and Volney, the French savant, were the themes of his warmest admiration. Our earlier poets, Freneau and Barlow, Humphreys and Alsop, were among those who held him in estimation for his sprightly conversation on all topics; but his own gratification was most ample when Correa de Serra or Muhlenberg dealt out the treasures of their natural science. Mitchill was imaginative and poetical, but preferred the Georgics to the *Æneid*. He deservedly classed Rush with the highest medical writers of his native land. He knew no North—no South; the Union, with him was one family. His cabinet boasted of few golden coin; but his collection of unclassified specimens, of divers sorts, was imposing, and his herbarium worthy of consultation. The whole after his demise were presented to the New York Lyceum. The proudest day of his life was that in which, at the Canal Celebration, in October, 1825, when he, with Clinton, Colden, Eddy, and others, united in “indissoluble marriage” the waters of our inland lakes with the ocean.

By many, Dr. Mitchill was considered of a passive nature, and indifferent to the sports of wits and humorists; but few men felt more severely the force of ridicule. He rarely retorted on his enemies, yet among the doctors often quoted in illustration “Garth’s Dispensary,” and suffered the stings of satire long and deeply. A peculiar combination of circumstances afforded me a striking opportunity in confirmation of this view of his character. He had met the medical faculty of the college for the examination of students; while thus engaged with the Board of Professors, a copy of one of the famous poems of Croaker & Co., was brought in by some stranger, and delivered to the Doctor. It was the well-remembered lines to “Phlogobombos.” The writer had ascertained the whereabouts of Dr. Mitchill, and had sent in the paper, wet from the press, at that responsible moment. The Doctor, glancing at it, looked all colors, and might have been hardly more wrought upon had an arrow pierced his intercostals. Nor was this effect of brief duration. His feelings suffered annoyance for a long period. The amiable and winning Joseph Rodman

Drake had been recently created a physician, and, notwithstanding his benevolent impulses, had awakened his muse to this literary exercise—to himself, doubtless, a pleasurable excitement, but which proved to the venerable Doctor, the immediate subject of Dr. Drake's genius, a wound long corrosive. At this very period of his life Drake was wasting by pulmonary irritation; his sensitive appearance, his attenuated frame, and pallor, betokened a brief existence. A few evenings after the publication of the satire, he presided over a select medical association, of which he was a member. It was the last time I saw him. Halleck has done undying justice to his memory; and the American critic, Tuckerman, has pronounced the "Culprit Fay" a genuine poem, as "it takes us completely away from the dull level of ordinary associations." The child of impulse, Drake, occasionally demonstrated the doctrine that an excess of the saccharine sometimes degenerates into the acid.

It is manifest that Dr. Mitchill from early life aimed to secure a name in letters and science, and that his multifarious pursuits ever kept him alive as a close observer. That he accomplished much is also demonstrative. His industry was unintermitting. He mingled with all classes. Though a medical man by profession, it may be justly inferred that, saving as a physician to some of our charities, he early abandoned private practice. His utilitarian principles led him incessantly into the field of physical inquiry; and when we contemplate the ample scope of his knowledge in physical investigation, not yet even approached by any other philosopher in our annals of science, we need not wonder that every day opened to Mitchill new subjects of study. There was something of our exalted Franklin in Mitchill. I have repeatedly witnessed his perplexities in new researches. The indigenous wheat which his intimate friend De Witt Clinton had described;* the Fezzan ram of Davis; our native Fire-fly; the trilobites of Trenton Falls,—all provoked new inquiry on his part, and De Kay and Torrey and

* See the Life and Correspondence of Sir James Edward Smith, edited by Lady Smith.

Cooper often summoned by new specimens his geological and botanical resources. He was the delight of a meeting of naturalists; the seed he sowed gave origin and growth to a mighty crop of those disciples of natural science. He was, emphatically, our great living ichthyologist. The fishermen and fish-mongers were perpetually bringing him new specimens; they adopted his name for our excellent fish, the streaked bass, and designated it generically as the *perca Mitchilli*. When he had circumnavigated Long Island, the Lighthouse at Sands' Point was called the Mitchill, and the topographers announced the highest elevation of the Neversink Hills as Mount Mitchill. His courtesy among all ranks, and the adulation he almost hourly received, rendered him a social friend among them, and an interpreter to all their queries. To an interrogatory put to him, what season would prove most advantageous in their business to catch blackfish, he replied with the promptitude of an Italian improvisatore :

When chestnut leaf is large as thumb-nail,
Then bite blackfish without fail;
But when chestnut leaf is as broad as a span
Then catch blackfish—if you can.

These lines, he said, were but stray feathers from his poetical pinions.

The records of State legislation and of Congress must be consulted to comprehend the extent and nature of his services as a public representative of the people. He manfully stood by Fulton in all his trials, when navigation by steam was the prolific subject of almost daily ridicule by our Solons at Albany; and when the purchase of the Elgin Botanic Garden, by the constituted authorities, was argued at the Capitol, he rose in his place, and won the attention of the members, by a speech of several hours' length, in which he gave a history of gardens, and the necessity for them, from the primitive one of our first parents down to the last institution of that nature, established by Roscoe, at Liverpool. It is probable that no legislative body ever received more instruction in novel information, than

the eminent philosopher poured out on this occasion; and even the enlightened Regents of the University may have imbibed wisdom from his exposition. With his botanical Latinity occasionally interspersed, he probably appeared more learned than ever. Van Horne, a Western member of the House, was dumfounded at the Linnæan phraseology, and declared such knowledge to be too deep for human powers to fathom. De Witt Clinton, only an hour or so before the learned Doctor's speech, had intimated to him the topic of his address, as best fitted to impress the Legislature with the value of the purchase, and Mitchill, in a barber's shop, digested the substance of his effective discourse. It was a common remark among our citizens: "Tap the Doctor at any time, and he will flow."

Dr. Mitchill was eminently a practical man. Nature was the altar at which he worshipped. His ambition developed itself among all the incongruities of his busy life. He could neither forget nor bear to be forgotten. He felt more comfortable when presiding over a gooseberry society than when occupying a seat as a sitting member of an archæological association. While a student at Edinburgh, he was decorated with the insignia of fellowship of the order of the Roman Eagle, by the celebrated Brown, the founder of the Brunonian system of medicine, and honors without number steadily flowed in upon him to the time of his death, from his own and remotest nations. His diplomas and scientific distinctions might have demanded a cart team for their conveyance. He said they were burdens ever imposed on the shoulders of the learned. It is questionable whether he ever suffered a morbid hour, or lost, by unoccupied faculties, any serious portion of his time. He deemed it imperative that each day should be marked by some service in the cause of science or humanity. Public attention must be aroused by some fresh suggestion, in theory or in practice; for, according to him, the echo of notoriety must perpetually reverberate around the heads of public men. Otherwise, added the Doctor, if this condescension be not made, the lines of the poet will assuredly most fittingly apply:

"I've been so long remembered, I'm forgot."

The quality of his scientific productions cannot here be pointed out. Yet how elaborate are his speculations in the promulgation and defence of his theory of septon; what an inspiration is his doctrine of the omnipresence of hydrogen: a doctrine afterward better comprehended by the brilliant achievements of Sir Humphrey Davy. How natural his story of the pennated grouse of Long Island was appreciated by Wilson; how fanciful was his notion of the identity of the poison of the rattlesnake with the causes of yellow fever. And most assuredly his science and his ingenuity abated not in public estimation from his forensic display in the still well-remembered case of "a whale is not a fish." He could argue constitutional law when Kent and Spencer were in the ascendant. He had great resources at command for illustration, and great independence in reasoning.

Though the love of fame was with him a ruling passion, he neither sought nor desired the ostentatious displays of luxurious and fashionable life. He was indifferent to the appropriations of extravagant expenditure; but the simplicity of his habits was best comprehended by all who best knew him.

I never encountered one of more wonderful memory. When quite a young man, he would return from church service and write out the sermon nearly *verbatim*. There was little display in his habits or manners; his means of enjoyment corresponded with his desires, and his Franklinian principles enabled him to continue superior to want. He often observed that he had seen many, who, in aiming to live in lofty edifices, had built themselves out of house and home. The great Dr. Black saw beauty in a crucible. The little violet, or an Indian skull, gave Mitchill more delight than the fashionable baubles of the day. By choice, his legs were in general his carriage, and this was in conformity to his notions of health and his early botanical life. His pedestrian tours often embraced many miles. He might, on these occasions, stray alone, or be accompanied by Masson or Michaux, or Le Conte, or Pursh. He thus studied nature in lawns and in forests, at brooks and at rivers, in her original attire, and plucked knowledge at its source.

He was wont to revisit the scenery of the spot where the apostle of Quakerism, George Fox, more than a century before, had given utterance to his inspirations, and under the famous oaks at Flushing hold communion with creation, with a volume of Cowley or of Pope, his most esteemed poet. At other times, tenaciously impressed with early associations, he would enter the memorable building, hard by, erected in 1661 by the primitive John Bowne, the Quaker victim of the persecuting spirit of the Dutch governor of the colony, Peter Stuyvesant, but who was subsequently honorably liberated by the authorities of Holland; and here, with some of his once juvenile friends, discuss the blessings of religious toleration. Thus constituted, no place was uninhabited to him. His instructor was everywhere. He was a gratifying specimen of those excellent practices which so peculiarly designated the Knickerbockers of the "olden times;" fidelity in fiscal concerns, and a scrupulous observance of the *meum* and *tuum*. Exact in pecuniary matters, yet willing to advance his competency, he never forgot the old currency of his youth, "that a pound demanded the payment of twenty shillings."

With all his official honors and scientific testimonials, foreign and native, he was ever accessible to everybody,—the counselor of the young, the dictionary of the learned. Even the captious John Randolph called him the Congressional library. To the interrogatory, why he did not, after so many years of labor, revisit abroad the scenes of his earlier days for recreation, his reply was brief: "I know Great Britain, from the Grampian Hills to the chalky cliffs of Dover; there is no need of my going to Europe; Europe now comes to me." But I must desist. The inhabitants of New York will long bear him in grateful recollection, and the Historical Society cherish his memory for the distinction he shed over that institution; for his unassuming manners, his kind nature, and the aid he was ever ready to give to all who needed his counsel. For their collections he furnished a eulogium on the great jurist, Thomas Addis Emmet; on Dr. Rush; also on Dr. Samuel Bard, and De Witt Clinton. His "Discourse on the Botanical Writers

of North and South America" is printed in their Transactions. Other addresses might be mentioned, abounding in curious facts and historical interest. For public occasions he was ever ready for any emergency. He addressed the Black Friars and glorified St. Tammany, whose genealogy he elaborated with antiquarian research. The Krout Club and the Turtle Club he enlightened by his gastronomic knowledge and natural science; while the naturalists of Long Island, at Prince's Garden, were stimulated to renewed efforts by his laudatory strains in behalf of botany and the knight of the polar star, the world renowned Linnæus. Dr. Mitchill has not unjustly been pronounced the Nestor of American science.

He died in New York, on September 7th, 1831. His funeral was a great demonstration for a private citizen. I was of the multitude that attended, and lingered at the grave until all, save the sexton, had withdrawn. Not being recognized by that official, I inquired whom he had just buried. "A great character," he answered, "one who knew all things on earth, and in the waters of the great deep."

It might prove too hasty a generalization to conclude that the high qualities of Dr. Mitchill's mind, thus specified, would be acknowledged by all. He had his detractors, and his peculiarities were such as not to be comprehended by every one. The masses were his friends and admirers, and a contemplative student, with knowledge of men and things, could analytically class him among remarkable individuals. It has already been observed that he was long a professor in Columbia College. Three of the presidents of that institution, who may be justly thought to have become well acquainted with him, either while he was a member of the faculty or subsequently, have given us their opinions concerning him. The classical scholar and grave bishop, Dr. Benjamin Moore, pronounced him a chaos of knowledge; but it demanded an intellect better stored with philosophical research to arrive at a just estimate of the scientific claims of Dr. Mitchill. The harmony of the Gospels, however edifyingly fitted for the pulpit, was hardly the best criterion by which to test the scientific acquisitions of a distinguished

savant. President Duer has frankly recorded of the Doctor, that he was more of a natural philosopher than a physician : he states that, upon the arrival from Europe of the Doctor, he was the lion of the day, not only in the medical and literary, but in the fashionable circles ; that his various learning was more valuable to others than to himself ; that he was used by others as a living encyclopædia ; that, upon the whole, he was more of a professor than a practitioner, shone more as an epicurean or a peripatetic than as an experimental or moral philosopher, and is remembered more for the goodness of his heart than the strength of his head. Those who are dissatisfied with this portrait will bear in memory that it is drawn by one who, though rich in the graces of elegant literature, had done little in the natural sciences, and was, moreover, somewhat a severe censor on such characters as Fulton, and Colden, and Clinton. A more generous estimate of Dr. Mitchill seems to have influenced the opinion of President King, of Columbia College ; he personally knew the Doctor long and well. With a kinder impulse, he pronounced him a man renowned for much and various learning, and of rare simplicity of character ; a genius, prompt in execution and original in combination ; a successful promoter of physical science.

None who knew Dr. Mitchill ever doubted his Herculean memory. Those most familiar with him were often delighted with the original train of thought which would rapidly spring up from the subject-matter before him, and the actual science he unfolded in the classification of new subjects and new materials. I am ready to leave the integrity of his mind, and the benefits derived from his labors, to the estimate which may be formed of them by the enlightened and whole-souled philosopher of the age, the learned and accomplished Agassiz.

It may be somewhat difficult to harmonize these conflicting opinions of contemporaries, enlightened and intelligent as they unquestionably were. But Dr. Mitchill long stood alone as the recognized devotee to physical studies in our population of that day, and sustained a foreign reputation little understood at home, either as to its causes or extent. Indifferent as he was

to the aids which often contribute to the increase of renown, his self-sustained reliance cast aside the displays of personal importance, and in the plenitude of his acquisitions, his simple manners, his beaming countenance, his cordial approach, and his frank utterance, proved effective substitutes for any deficiencies. What else was left to the beholder, but wonder and admiration to witness this unsophisticated disciple of Nature, in the public walks of the city, giving counsel for humanity's sake to an infirm beggar as to the easiest method by which he might carry his burden, while perhaps he himself might be returning homeward with his pockets freighted with a flattering correspondence from the most eminent savans of Europe. The man had a heart as well as a head.

In the prime of his manhood Dr. Mitchill was about five feet ten inches in height, of comely, rather slender and erect form; in after life he grew more muscular and corpulent, and lost somewhat of that activity which characterized his earlier days. He possessed an intelligent expression of countenance, an aquiline nose, a gray eye, and full features. His dress at the period he entered into public life was after the fashion of the day, the costume of the times of the Napoleonic consulate; blue coat, buff-colored vest, smalls, and shoes with buckles. He was less attentive to style of dress in his maturer years, and abandoned powder and his cue. From a hemorrhagic tendency of his chest at the age of seventeen years, he adopted exercise on horseback, and was fortunate enough to avert the progress of pulmonary evils. His personality, however, varied in advanced life with the cogitations of his graver years, and he might at times be seen without hat or overcoat, exposed to the vicissitudes of inclement weather. His robustness preserved his full features, and to the last not a wrinkle ever marked his face, nor did lapse of years modify his thirst for knowledge, or his cordial and prompt and sprightly utterance; thus setting at nought the declaration of the poet:

“Old age doth give by too long space,
Our souls as many wrinkles as our face.”

The imperfections of this brief memorial of Dr. Mitchill, might be rendered less conspicuous were we to avail ourselves of some few extracts from his philosophical lucubrations, particularly on geology. A sentence or two from his discourse on the death of Jefferson, a theme perhaps more popular, must suffice. He is speaking of the Declaration of Independence, that manifesto of freedom for all nations and all time.

“For sententious brevity, strong expression, and orderly disposition of the topics, the reading of it always brings to my mind that incomparable performance, the Litany of the Christian Church. In this, miserable sinners invoke the Father of Heaven; in that, suffering subjects submit facts to a candid world. In the latter, the One in Three is entreated to spare from all evil and mischief those who have been redeemed; in the former, a worldly prince, for a continuance of cruelties, is denounced as a tyrant, and unfit to be the ruler of a free people. In the Litany, the Church supplicates blessings and comforts, from a being willing to grant them; in the Declaration, the nation puts at defiance the power that neither pities nor forgives.”

How far the Quaker discipline which Mitchill received in his earlier youth had influence on his religious belief, is left to conjecture. The principles of that peculiar denomination must have taught him the value of sound morals and upright conduct, and through life he illustrated the excellence of sound ethics. His inquiring mind, so wide in its grasp for knowledge, could scarcely be gratified to the entire exclusion of studies deemed sacred. Passing through that remarkable period of the early constitutional organization of the States, when the scepticism of France had diffused itself among all classes of the Christian world; when the Jacobin element in this city was so strong that the goddess of Liberty received the homage of a divinity from every order of society; and when from even reverend lips proceeded the significant sentence, “Better for the American Republic to elect an infidel President than a Christian Federal-

ist," we find even in such commotion no cause to reproach Mitchill with the utterance of doubtful doctrines, or that he betrayed the uncertainties of infidelity. In his later life, deeper feelings of Christian hope were strengthened by the intense prosecution of his favorite inquiries into the nature and designs of Providence, thus bringing together the great argument of revealed truth illustrated by the harmony of creation. He doubtless often felt the full force of the memorable words of the celebrated Bishop Horne, "When man was first formed, creation was his book, and God his preceptor." His hymnology was extensive, and his calm spirit was awakened by the martial strains of Toplady, and at his last illness, of a pneumonic character, which was but of a few days' duration, his quickened spirit was sustained by Christian promises. It is pleasurable to record this benevolent man in the ranks of apostolic faith, and if, peradventure, he was held in contemplation on the megalonyx longer than with the Horæ Paulinæ, his latitudinarian thoughts on some points of polemical controversy are to be overlooked in his devotion to the great study of the works of God.

It may further enhance our estimate of these pure studies in which Dr. Mitchill's attention was so largely absorbed, when we consider that they were the operations of a mind free from all sordid considerations, cultivated at a period when natural science was just dawning on the land; when Cuvier's name had scarcely reached us, when geology had not enlisted a solitary philosopher in her cause, and that pursuits of this sort absorbed fiscal means which were never realized by corresponding returns. He, however, was rewarded, and obtained that which money could never bring. "I have believed to the utmost of my belief," were among the last words of the dying philosopher.

There must have reigned within his bosom the benignant principles of primitive Barclay. Like his illustrious predecessor in literature and medical science, Dr. Garth, he seems to have practised Christianity without knowing he was a Christian.

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He now lies in Greenwood Cemetery, where a beautiful monument is erected over his remains by his surviving widow. Philosophy will be a pilgrim at his tomb. His portrait, by Jarvis, is a faithful likeness.

INSCRIPTION ON THE MONUMENT.

SAMUEL L. MITCHILL,

DIED

7TH SEPTEMBER, 1831, AGED 67 YEARS.

"Whether there be knowledge it shall vanish away. For we know in part."
1st Cor., 13th Chapt., 8th and 9th verses.

EPIGRAM.

Medicus, Physicus, Civis, Senator,
Quantus fuerit dicant alii
Indolem ejus humanum
Vitæ simplicitatem, fidem incorruptam
Desideriumque nostrum
Fas sit commemorasse.

JOHN W. FRANCIS

DAVID HOSACK.

1769-1835.

WHEN Wilkie was in the Escorial looking at Titian's famous picture of "The Last Supper" in the Refectory, an old Jeronimite said to him, "I have sat daily in sight of that picture for now nearly threescore years. During that time my companions have dropped off one after another; all who were my seniors; all who were my contemporaries, with many or most of those who were younger than myself. More than one generation has passed away, and there the figures in the picture have remained unchanged. I look at them till I sometimes think that they are the realities and we but the shadow."

Biography, in like manner, saves from the wreck of time those whose good deeds live after them. It serves as an example to others, by holding up to view such characters as are worthy of imitation; and thus, like the portrait of the artist, they become the substance, while the shadows of the living multitude are passing in review before them. While history, on the other hand, furnishes a record of circumstances and events, it at the same time creates a desire for a further acquaintance with the individual who has occupied so conspicuous a position in them, and who has, either by his talents or efforts, thus been elevated to a high rank among his fellow-men. Biography may therefore properly be considered as a part of history and as inseparably connected with it; hence, the lives of distinguished men, in whatever profession or situation they may be found, become doubly interesting. Of the three learned professions, divinity, law, and physic, none contribute more to

the amelioration of man than that of Medical Science. The character of a learned and good physician is always deserving of the most profound attention and admiration. Such we conceive to be that of the eminent individual, the subject of the following memoir.

David Hosack was born on the 31st of August, 1769, in the house of his grandfather, No. 44 Frankfort Street, in the city of New York. His parents were Alexander Hosack and Jane Arden. They were married on the 1st April, 1768, in the city of New York. They had seven children, of whom David was the eldest. His father, Alexander Hosack, was a native of the town of Elgin, Murrayshire, Scotland, and was born the 29th of August, 1736. In 1758, at the age of twenty-one, he served as an officer in the artillery under General Sir Jeffrey Amherst, with whom he embarked for this country, and was at the retaking of Louisburgh, and prided himself upon being at the first cross of bayonets in America, on which occasion he was wounded. Jane, his wife, the daughter of Francis Arden, was born on the 2d of March, 1743. Her father's family came from England, that of her mother from France; being compelled to leave their native country by the persecutions which followed the revocation of the Edict of Nantes.

The subject of this memoir, after receiving the ordinary education of childhood, about 1783 and 1784 entered as a pupil of the Rev. Dr. Alexander McWhorter, of Newark, New Jersey, at whose academy he remained until 1785, attending to the Latin tongue, geography, arithmetic, and other studies. Under Dr. McWhorter he also commenced the study of Greek; but as Dr. Peter Wilson, of Hackensack, was more distinguished as a teacher of that language, he was enrolled in his academy.

In 1786, he entered as a freshman in Columbia College, New York, where he remained until he advanced half-way through the junior year. He availed himself, in the meantime, of a private teacher, spending an hour of each afternoon in reading the classics under the direction of James Hardie, a graduate of Marischal College, Aberdeen, and well known as an eminent teacher. He also found leisure during the same

period to give a portion of his attention to the French language, in association with a few of his fellow-students, among whom were the late Rev. Dr. John Mason, De Witt Clinton, John Randolph, Chancellor Jones, and others. While a pupil in Columbia College he received three testimonials, one of which was for public speaking.

Finding his time not fully occupied in the commencement of the junior year, he resolved upon the study of medicine, and accordingly, in May, 1788, entered as a private pupil with the late Dr. Richard Bayley, an eminent surgeon in New York. He had scarcely begun his studies before the celebrated "Doctor's Mob" occurred, which threatened serious results to those concerned; it arose in consequence of the imprudence of some of the students carelessly pursuing dissection in the building upon the site since occupied as the New York Hospital. This mob caused many of the professors to absent themselves from the city, and others to seek shelter in the city jail. Mr. Hosack, with the rest of the students interested, learning that the mob had seized upon and demolished the anatomical preparations found in the lecture-room above referred to, repaired immediately to Columbia College, with the view of saving such specimens as were to be found in that institution. Before reaching the college, however, and when on his way in Park Place, he was knocked down by a stone striking him on the head; he would, in all probability, have been killed, had it not been for the protection he received from a neighbor of his father, Mr. Mount, who was passing at the time, and took care of him; he never saw that gentleman afterwards without feeling and expressing his gratitude to him for his kindness.

In the autumn of 1788, being ambitious of completing his collegiate course, preparatory to receiving his degree of medicine, he removed to Princeton, New Jersey. Quoting from memoranda which he has left for the benefit of his children, he says:

"After being examined with the students of the college then entering into their senior year, I was admitted into the senior class, and was graduated Bachelor of Arts in the autumn of

the succeeding year, that is, 1789. My great inducement for removing to Princeton was my desire to complete my course of collegiate studies as soon as possible, in order to devote my exclusive attention to medicine, to which I had now become ardently attached, and that I might also have the benefit of attending the valuable lectures on Moral Philosophy and Elocution delivered by the learned president of that college, the Rev. Dr. Witherspoon; those of Belles-Lettres and Composition, by the vice-president, the Rev. Dr. Samuel Stanhope Smith; and the instruction in Mathematics and Natural Philosophy, by the celebrated mathematician, Dr. Walter Minto, all of which presented attractions which I could not resist. Having finished my course at Princeton, I returned to New York, and resumed my favorite medical studies, to which I now gave my undivided attention, availing myself of every advantage which the city at that time presented. I attended the lectures on Anatomy and Physiology, delivered by Dr. Wright Post; those on Chemistry and Practice of Physic, by Dr. Nicholas Romayne; and the valuable course on Midwifery and the Diseases of Women and Children, by Dr. Bard. I also attended the practice of physica and surgery at the almshouse, which then offered the only means of clinical instruction in this city; they were, however, very ample, the house being daily visited by Dr. Post, Dr. William Moore, Dr. Romayne, and Dr. Benjamin Kissam. In the autumn of the year 1790, being desirous of obtaining all the advantages of instruction which the United States at that time afforded, I proceeded to Philadelphia, the medical school of which had already acquired great celebrity from the learning of its professors, especially Drs. Shippen, Rush, Kuhn, Wistar, and Barton. At that time a division already existed among the Faculty, which led to the institution of a medical college as a rival school to that connected with the University, and not a little contributed to the benefit of both, and the ultimate advancement of the science of medicine in Philadelphia. I entered as a regular pupil, and attended all the courses of lectures delivered during the winter in the University. I also attended those delivered on the Theory and Practice of Physic

by Dr. Rush, then a professor in the College of Philadelphia, as well as his clinical instructions in the Pennsylvania Hospital. In the summer of the succeeding year, after the usual private and public examination, I was admitted to the degree of Doctor of Medicine in the University of Pennsylvania, upon which occasion I duly defended an inaugural dissertation on *Cholera Morbus*, in which I endeavored to illustrate the doctrine of Dr. Kuhn on that subject, that an acid in the *primæ viæ*, chiefly the effect of the use of ascitants, was the most usual proximate cause of that disease. Upon that subject my views have been materially changed since that period."

After receiving the degree of Doctor of Medicine, Dr. Hosack returned to Princeton, and married Miss Catharine Warner, a lady of great worth, to whom he had become attached while pursuing his collegiate studies. "Marriage," says Leibnitz, "is a good thing, but a wise man ought to consider of it all his life." His marrying at that early age might, perhaps, be considered indiscreet on his part, as he was without the means of supporting a family; it doubtless, however, proved an incentive to exertion. Soon after, by the advice of Dr. Rush and others whom he consulted, he removed, in the autumn of the same year, to Alexandria, in Virginia, which he then believed would, at some future day, be the capital of the United States. He took with him letters of introduction from Dr. Witherspoon and Dr. Smith, the president and vice-president of his Alma Mater, Princeton College, as well as from his friends and preceptors of the University of Pennsylvania.

He soon acquired a considerable practice; it, however, proved insufficient for his wants. Being dissatisfied after a year's experience, and desirous of residing near his family, he returned to New York in 1792, a step which ultimately proved very judicious. Upon commencing the practice of his profession at this time, he felt the necessity, and perceived the importance of a European education, and, as he says, "observing the distinction which our citizens at that time made between those physicians who had been educated at home, and those who had had additional instruction from the Universities of

Europe, and knowing how little property I had reason to expect from my parents, I found that my chief dependence was upon my own industry and unceasing attention to the profession I had chosen as the means of my subsistence: my ambition to excel in my profession, did not suffer me to remain insensible under such distinction. Although it was painful for me to think of leaving my family, consisting then of a wife and child, I accordingly suggested to my father the propriety of my making a visit to Europe, and of attending the medical schools of Edinburgh and London. He at once, with his characteristic liberality, acquiesced in my views and wishes. In August, 1792, leaving my family to the care of my parents, I took passage for Liverpool. The day after my arrival there, I called upon Mr. William Renwick, the father of Professor Renwick, of New York, to whom I had letters of introduction; he kindly insisted upon my removal to his house, to remain with his family during my stay in Liverpool. Mr. Renwick introduced me to many of his friends in that town; among these were the late Dr. William Currie, Dr. Brendrith, Dr. Thomas Renwick, and others, from whom I received many kind attentions. At the house of Dr. Brendrith I passed an evening in the society of some of the choicest spirits, who at that time distinguished the town of Liverpool, and who were assembled to meet the Ayrshire poet Burns, then on a visit there, and already becoming distinguished for his enchanting verse. After supper, the toddy passing freely round, he gratified us by singing one of his own songs. I was then but little aware of the fame that awaited him, and the distinction that his name has since acquired. From Liverpool I proceeded to Edinburgh, where I arrived in time to attend the medical lectures of the University of that city. I attended not only the lectures delivered by Dr. Monro on Anatomy, Dr. Black on Chemistry, Dr. Gregory on the Practice of Physic, Dr. Duncan on Institutes, Dr. Home on Materia Medica, Dr. Alexander Hamilton, and his son Dr. James Hamilton, the present Professor of Midwifery; but I also attended the Demonstrations in Anatomy by Andrew Fyfe, the practice of the Infirmary and the clinical lectures delivered

during that winter in this institution by Dr. Duncan, Dr. Gregory, Dr. Home, and Dr. James Hamilton, afterwards the author of the celebrated work on purgatives. I also enjoyed, in addition to the advantages I received from the Professors' public courses of lectures, the benefit of much private intercourse with them and their families, especially those of Drs. Duncan, Gregory, and Alexander Hamilton. At the table of Dr. Gregory, I had the gratification frequently of meeting many of the distinguished literati of Edinburgh; among these were Dr. Greenfield, the colleague of the Rev. Dr. Blair, and for some time the reputed author of the Waverley Novels, Dr. Rotherham, Professor Rutherford, and other gentlemen of distinction. Upon one occasion I had also the pleasure of meeting at dinner, at the house of Dr. Gregory, two of his sisters, who were then making an annual visit to their brother: these were the ladies to whom their father, Dr. John Gregory, had addressed his memorable 'Legacy to his Daughters.' "

In addition to the foregoing interesting characters mentioned here, many others might be cited from whom Dr. Hosack received every kindness and attention, such as Dr. Charles Stewart, a distinguished physician of Edinburgh, the Rev. Dr. Erskine, of Lauristan, and Henry Mackenzie, the author of the "Man of Feeling," at whose table he was frequently a guest. He then continues his remarks. Speaking of the learned divines, perhaps the most learned of any age, he says: "I regularly attended church, sometimes hearing sermons from Principal Robertson, at other times from Dr. Erskine, Sir Henry Moncrieff, of Wellwood, and occasionally from Dr. Blair. Dr. Robertson's discourses were distinguished for the valuable instruction they conveyed, and the dignified style and manner in which they were delivered. Dr. Erskine was remarkable for the piety and Christian fervor which pervaded his sermons, and in which they exhibited great resemblance to those published by his relatives of the same name. The most eloquent and animated preacher of Edinburgh was Sir Harry Moncrieff, whose discourses were attractive, and were always listened to with the utmost attention by a crowded audience, while those

of the celebrated Dr. Blair, though sanctioned by the presence of the town council of Edinburgh, with their Provost at their head, who always attended as a body with their insignia of office, and accompanied him to his church every Sabbath, in a regularly formed procession, were not remarkable for any interest except as beautiful moral essays. But these even were delivered in a dull, monotonous, prosing manner, as if the speaker himself were scarcely conscious of the merits of the admirable discourses he was pronouncing; totally forgetful of the '*si vis me flere*,' and other lessons so happily inculcated in his lectures on rhetoric, and so practically illustrated in his valuable papers contained in the 'Royal Edinburgh Transactions.' "

The following memorandum of the daily disposal of his time, shows the nature and incessant occupation of his mind during the fall and winter he spent in Edinburgh:

Duncan's Institutes,	. . . . .	at 8	A.M.
Gregory's Practice,	. . . . .	from 9 to 10	"
Black's Chemistry,	. . . . .	" 10 " 11	"
Home's Materia Medica,	. . . . .	" 11 " 12	"
Infirmary,	. . . . .	" 12 " 1	"
Monro's Anatomy,	. . . . .	" 1 " 3	P.M.
Hamilton's Midwifery,	. . . . .	" 3 " 4	"
Clinical Lectures,	. . . . .	" 6 " 7	"
Fyfe's Demonstrations, in the evening,	. . . . .	" 7 " 8	"

In the spring of 1793, while in Scotland, he made a short tour to the north as far as Elgin, the birthplace of his father, and there met several of his relations, two uncles, &c., by whom he was introduced to the Brodies, of Brodie House, from whom he received the greatest kindness and attention. He remained under their roof for a fortnight, and was introduced to Mrs. Grant, of Seabank, the well-known authoress, the late Duke and Duchess of Gordon, and the Marquis of Huntley. On his way to Elgin he passed a few days at Aberdeen, to deliver letters of introduction given him by Dr. Gregory to three distinguished persons residing there. Dr. Beattie, of Aberdeen, writer of "The Minstrel," the Rev. Dr. Campbell,

and the Rev. Skeene Keith, of Keith Hall. In his Memoranda, he says: "I can never forget my first visit to the amiable and excellent Dr. Beattie, and the hospitality with which I was received." He was introduced by Dr. Beattie to his neighbor, Baillie Shepherd, and the celebrated Dr. Campbell, author of the "Essays on Rhetoric," and still more distinguished for his great work on the Gospels, and his "Observations on Miracles," written in reply to David Hume, and the only work of the numerous replies to his writings which he considered as possessing great merit, Dr. Beattie's excellent "Essay on the Immutability of Truth" notwithstanding. After his return to Edinburgh, he proceeded to London, where he entered as a pupil of St. Bartholomew's Hospital, under Sir James Earle, the son-in-law and successor to the celebrated John Hunter, whose death took place at this time, and whose funeral he had the gratification of attending. He also frequently visited other hospitals, when any important surgical operations were performed, surgery being the favorite subject of his pursuit; he nevertheless did not neglect the collateral branches of medical science, as will be seen by his own statement: "Having," as he says, "upon one occasion—while walking in the garden of the Professor Hamilton, at Blandford, in the neighborhood of Edinburgh,—been very much mortified by my ignorance of botany, with which his other guests were familiarly conversant, I had resolved at that time, whenever an opportunity might offer, to acquire a knowledge of that department of science. Such an opportunity was now presented, and I eagerly availed myself of it. The late Mr. William Curtis, author of the 'Flora Londinensis,' had at that time just completed his botanic garden at Brompton, which was arranged in such manner as to render it most instructive to those desirous of becoming acquainted with this ornamental and useful branch of a medical education. Although Mr. Curtis had for some time ceased to give lectures on botany, he very kindly undertook, at my solicitation, to instruct me in the elements of botanical science. For this purpose I visited the botanical garden daily throughout the

summer, spending several hours in examining the various genera and species to be found in that establishment. I also had the benefit, once a week, of accompanying him in an excursion to the different parts of the country in the vicinity of London. Dr. William Babington, Dr. Thornton, Dr. now Sir Smith Gibbs, Dr. Hunter of New York, the Hon. Mr. Greville, and myself, composed the class in these instructive botanical excursions, in the summer of 1793.

"By Mr. Dickson, of Covent Garden, the celebrated cryptogamist, the '*maximus in minimis*,' as Mr. Curtis has very properly and facetiously denominated him, I was also initiated into the secrets of the cryptogamic class of plants.

"In the spring of 1794, I also attended the public lectures of botany delivered by the president of the Linnæan Society, Dr., now Sir James Edward Smith; and by the kindness of the same gentleman, I had access to the Linnæan Herbarium.* I spent several hours daily for four months examining the various genera, and the most important species contained in that extensive collection. Notwithstanding my attention to botany, I was not unmindful of the other departments of medicine.

"During my residence in London, the winters of 1793-4, I devoted myself to anatomical dissections, under the direction of that very distinguished teacher of anatomy and surgery, Dr. Andrew Marshall, of Flavel's Inn, Holborne; to chemistry, practice, and materia medica, under Dr. George Pearson, of Leicester Square; to mineralogy, as taught by Schmeisser. At the same time, I daily visited the hospitals, and attended the various surgical operations which were performed during that period. I also frequently visited the Leverian Museum, having taken a ticket, which gave me the privilege of seeing and examining the precious collection of objects in natural history contained in that valuable establishment.

"In the course of that winter, by the advice of my friends,

* The acquaintance thus begun with this distinguished botanist, Sir James Edward Smith, warmed into an affectionate friendship, which, judging from his letters to my father, now in my possession, continued uninterrupted during their lifetime.

Sir Joseph Banks, Dr. Marshall, Dr. George Pearson, Dr. Robertson, of the 42d, and Dr. Wilson, to whose examination I previously submitted the manuscript, which I communicated to the Royal Society of London my *Observations on Vision*, published in the *Transactions* of that year, 1794,* and for which, after due examination by a committee, and a report to the Society, I received the thanks of that body."

In the midst of such diligent application and study, it is not surprising that he should, as a young man, have sought recreation in the various amusements of London. Having been initiated in the excellencies of the drama while in Edinburgh, he says: "I was prepared to enjoy the superior and more numerous attractions of London, in the succeeding years of 1793-4, a period when the stage displayed a constellation of talent that has never been exceeded, if it has ever been equalled.

"John Kemble, and, if possible, his more extraordinary sister, Mrs. Siddons, Mr. and Mrs. Pope, Miss Farren, since Countess of Derby; Mrs. Eden, Mrs. Jordan, Miss De Camp, afterwards the wife of Charles Kemble; John Palmer, Parsons, Quick, Holman, King, Bannister, Munden, Suett, Faucett, and Irish Johnstone, afforded to the friends of the drama a gratification never to be forgotten; while in song and at the opera, Madame Mara, and Billington, Banti, Mrs. Crouch, Signora Storace, Incledon, Kelly, and others, fascinated the lovers of music with their most exquisite performances." These delightful amusements, however, alluring as they were, did not divert him from the more important objects of his visit to Europe.

In 1794 he returned to New York in the ship *Mohawk*, after a passage of fifty-three days. Among his fellow-passengers were Mr. Thomas Law, brother of the late Lord Ellenborough, Mr. Daniel McKinnon, author of "*Travels in the West Indies*," and Mr. Hunter, late Senator of the United States from Rhode Island. During the voyage, typhus fever made its appearance, and became very general, particularly among the steerage pas-

* See "*Philosophical Transactions*."

sengers. Dr. Hosack being the only physician on board, was called upon to exercise his professional skill in the treatment of them, in which he was singularly successful, not losing a solitary case. His services were duly appreciated by all, as was evinced by the unsolicited vote of thanks published in the daily papers.

From this date commences his professional career in the city of New York, previously to which, however, I must take occasion to recur to the time devoted to his education. It will be seen that throughout his preliminary studies, as well as during the time devoted to the study of medicine, he, at an early age, evinced an ardor and persevering industry in the pursuit of knowledge which characterized him through life, and by which he doubtless was enabled to arrive at that enviable rank in his profession, so gratifying to his ambition, and to which but few attain. On one occasion, in conversation with his children, probably with a view to encourage them to further action, he remarked that he was himself naturally very dull when at school, so much so that it was only by diligent application and labor he was enabled to accomplish his ordinary tasks. By the record made by himself, it will have been perceived that in enlarging the area of his studies, the suggestions always came from himself, the reverse of the general rule, as parents usually are obliged to urge upon their children the necessity, and to point out to them the advantages of education in early life. The devotedness to his studies, and the full occupation of his time, served also another purpose, that of diverting his mind from gloomy reflections, to which, in his youth, he was much inclined.

We shall now return to that period from which we date the commencement of his professional career in the city of New York. He was encouraged by his success; experiencing the benefit growing out of an intimacy formed with his fellow-passenger Mr. Law, who, upon his arrival in this country, took pleasure in introducing him to most of his acquaintances, among whom were General Hamilton and Colonel Burr. The favorable impression he made upon the minds of these distinguished persons induced them to adopt him as their family physician.

His receipt from his first year's practice, together with that derived from four private pupils, amounted to about fifteen hundred dollars, which enabled him to support his family, consisting at that time of himself and wife; his only child, a son, having died during his absence.

In 1795 he was honored by being appointed to the Professorship of Botany in Columbia College, upon the duties of which he immediately entered. At the termination of the course he published a Syllabus of his lectures, afterwards inserted in his "Medical Essays." In the autumn of 1795, the yellow fever made its appearance in the city of New York, and was peculiarly malignant and fatal, affording ample opportunity to young medical men to distinguish themselves.

At this time he attracted the notice of Dr. Samuel Bard, an eminent physician of New York, who, forming a strong friendship for him, and with due appreciation of his talents, was induced to place him in charge of his practice during a short visit to the country. Upon his return to the city, gratified by his assiduity and attention to his patients, Dr. Bard proposed a connection with him in business preparatory to his retiring from the profession, which he did after the lapse of three or four years, leaving Dr. Hosack in the enjoyment of an extensive and profitable practice.

This preference was in itself highly complimentary; not but that Dr. Hosack would have been successful in his profession with his energetic and determined character, and the distinguished friends he had already acquired. Still, the patronage of one so eminent as Dr. Bard, while it tended to confirm them in the correctness of their choice, was certainly of the greatest importance to so young a man. A feeling of affection grew out of this connection more like that of father and son.

Having lost his wife and child, he was again married by the Right Rev. Bishop White, of Philadelphia, on the 21st of December, 1797, to Mary Eddy, daughter of James and Mary Darragh Eddy. The issues by this marriage were nine children, of whom five are now living.

At this period of his life he became more particularly known

to the community for his success in the treatment of yellow fever, which had made its appearance during four successive summers, viz., 1795, 1796, 1797, and 1798; and since in 1803, 1805, 1819, and 1822. From the extensive opportunity of observation thus afforded him, he became a strong advocate of contagion and of the foreign origin of the disease, and was the first to pursue the sudorific and mild treatment of it, to which may be traced the successful results attendant upon his practice. To use his own language: "I have generally," he says, "pursued the sudorific treatment during every visitation of yellow fever since 1794. With due respect for the opinions and views of other practitioners, I am no less convinced of the injurious consequences to be apprehended from the indiscriminate use of the lancet and mercury in this epidemic form of fever."*

To quote from a biographical sketch of Dr. Hosack, published in the "National Portrait Gallery," in 1834, where the writer remarks: "The attention which Dr. Hosack paid to this disease in the years referred to, received, in a peculiar manner, the approbation of his fellow-citizens; for it was remarked of him that during those several epidemics he was always present, and thereby enjoyed the amplest opportunity of observation, and of forming correct opinions of the nature and character of the disease."

In 1798, my father was himself attacked with the yellow fever, and he pursued in his own case the same treatment he had so successfully employed in others. Such, too, was the public confidence in the correctness of his views and practice, that, at the request of the Corporation and Board of Health of New York, he was frequently called upon for the express purpose of ascertaining the character of a disease, to allay thereby the anxiety of their fellow-citizens. In 1811, he was requested, as a member of a committee, to investigate the nature, and trace the introduction of the yellow fever, which appeared at Amboy, in New Jersey, in that year. The report of that com-

* See his "Lectures on the Practice of Medicine," published in Philadelphia, and also his "Medical Essays," vol. 3.

mittee, which was communicated to De Witt Clinton, as President of the Board of Health, was written by Dr. Hosack. This luminous and circumstantial statement was received as a conclusive document, showing the specific character of the disease, and its communication by means of contagion, and was republished in the medical journals of Edinburgh and London, and also in the third volume of the Medical and Philosophical Register of New York.

Upon the death of Dr. William Pitt Smith, in 1797, who held the Chair of Materia Medica in Columbia College, Dr. Hosack was appointed to that branch, in addition to the one of Botany already held by him. In this department he acquired further reputation. He continued to fill these joint professorships until 1807, when the College of Physicians and Surgeons of the State of New York was established, when he was chosen Professor of Surgery and Midwifery. He soon, however, relinquished the former for that of the Theory and Practice of Physic and Clinical Medicine. By the foregoing statement, it may be observed that Dr. Hosack had already, and in so short a space of time, held these professorships, and had actually lectured upon five different branches of medical science.

I have next to speak of the qualifications of Dr. Hosack as a physician. "A man can be neither a philosopher nor a physician," says Herz, "by imitation or by rules, but by native genius alone." Professor Vogel remarks: "Perhaps there is no science which requires so penetrating an intellect, so much talent and genius, so much force of mind, so much acuteness and memory, as the science of medicine." These requisites were eminently conspicuous in the character of Dr. Hosack.

He now became distinguished as a general practitioner, enjoying a more extensive practice than many of his contemporaries, and among his patients may be enumerated many of the most learned and distinguished citizens of New York. Believing that his character as a general practitioner and lecturer in medical science could best be described by one less interested than myself, I have taken the liberty of inserting here a sketch drawn by my friend Dr. Minturn Post, who

enjoyed the advantage of attending his lectures, and who was one of my father's most ardent admirers, and who, from his intimacy with Dr. Hosack, is well calculated to do him justice: "It has often been remarked that many men, though gifted with great talents, and whose fame rests upon an enduring basis, were in no degree remarkable either for conversational or oratorical powers, while in others these qualities have been happily blended. In no respect was Dr. Hosack more remarkable than as a lecturer; gifted with a commanding person and a piercing eye, of an ardent temperament, and of strong convictions, his manner of treating the various subjects connected with his professorship was at once bold, impressive, and eloquent.

"Occupying, during the most distinguished portion of his career, a chair—that of the Theory and Practice of Physic and Clinical Medicine—which, perhaps, embraced a greater variety of subjects than any other, the scope which he gave to his observations was of the most extended character. None of the ills to which flesh is heir escaped his research or baffled his investigation.

"The beautiful science of botany lent to less attractive subjects its kindred grace and classical allusion, and added a charm to a discourse already beaming with observations of the highest import to humanity.

"Gifted as Dr. Hosack was with a keen desire for the acquisition of knowledge, he was strongly attracted to all who exhibited an ambition to excel in the various departments of learning. He thus became intimately associated with the most remarkable men of our country, and was imbued with the spirit, the manner, and the characteristics of the most distinguished votaries of science, literature, and art. Stored as his mind thus was, he was enabled to give to subjects, comparatively unattractive, an interest which was imparted to them by the charm of his impressive manner. His great object was to direct the student to the importance of the subject under examination, to lead him by his eloquence, and to rivet his attention by his earnestness, and no man ever succeeded better as a public lecturer in attaining these results.

"Students from every part of our widely extended country were ever anxious for the hour of his lecture to arrive, and were inspired with new zeal as they listened to the eloquent teachings that fell from his lips ; and many a practitioner of the healing art in every State of our Union, and now performing the duties of his profession, recurs with pleasure and gratitude to these recollections of his more youthful days, and with profit to the instructions he then received. The writer well remembers the absorbing interest these lectures awakened, and the impatience with which they were expected.

"Dr. Hosack was a man of great and untiring industry. Numerous as his engagements were, the appointed hour found him at his desk in the lecture-room, with his notes before him. Upon many subjects connected with his branch of medical science, he held opinions which were controverted by many of his professional brethren. Upon these subjects especially his style of lecturing was conspicuous for its bold and fearless character. As a professor of the science of medicine, he was of the opinion that many of its most distinguished votaries had taken too limited a view of its nature and extent, and had founded theories, which being based upon some particular part of the system, were found, when applied to practice, to be inadequate and valueless.

"In his lectures, he says : ' We shall not, as some have done, confine ourselves to any particular part of the body in considering the cause of disease, but shall examine the whole, and in so doing, we shall adhere strictly to the inductive system to establish our facts. This was not formerly the case. Thus, Hoffman gave his whole attention to the nervous system, as also Cullen, who attempted to explain all the phenomena of disease by the same cause ; he overlooked the fluids entirely, except in diabetes, typhus, and scorbutus. Before the time of Hoffman, all was humoral pathology. Darwin resolved all by the absorbent and nervous systems ; Sydenham and Boerhaave by the fluids. Rush and his followers are modifiers of the Brunonian school. But the dreams and speculations of a Darwin, and the fertile imagination of a Brown, shall have no place here. I

attend to the whole circle,—to the nerves, fluids, and solids; in fine, to every part of the system, for every part may become the seat of disease.

“The principles of the practice of medicine should invariably be deduced from the structure of the body and the cause of disease. Principles are but the assemblage and classification of facts, and are the only safeguards to practice, as has been well observed by Rush. The plan to be pursued in studying the theory and practice of medicine will be :

“1st. The structure of the human frame, more especially the various functions it performs in health, including those that appertain to the mind.

“2d. The natural functions of the system; the causes of disease, whether inherent in the body, or produced by the operation of external agents; the influence of climate, soil, clothing, food, sleep, and exercise, both bodily and mental; the passions of the mind; the functions peculiar to the sexes; the various trades and occupations; as also the sensible and adventitious qualities of the atmosphere in the production of endemic and epidemic diseases.

“3d. How far the functions of the constitution extend their influence, in overcoming or preventing disease, as ascribed to it by the ancients and some moderns, under the term of “*vis medicatrix naturæ*.”

“4th. The arrangement in the best order of the diseases to which the human body is subject, with their respective treatment and symptoms.’

“The extended outline exhibited above, gave free scope to the energetic and comprehensive mind of Dr. Hosack, embracing in its outline both the primary and collateral branches of the healing art. His course was marked by an extent and variety of information, which made it singularly attractive to the young votary of science. Of an ardent and sanguine temperament, he threw his whole soul in support of the opinions he had adopted, and appeared at all times ready as their champion and defender. His advocacy of the doctrines of the humoral pathology was marked by the ardor and decision which distinguished his character. His illustrations in support of these principles, as

drawn from typhus, scorbutus, and other diseases, were at once pointed, cogent, and convincing. Could he have lived to see the manner in which these doctrines have since been received by distinguished members of the profession, how great would have been his joy and satisfaction.

“Dr. Hosack was gifted with a fine sonorous voice, great play of expression, and a remarkable vivacity of manner, qualities which, being as it were contagious, begat in his youthful auditory a kindred sympathy, relieved from the tedious monotony of manner, which has characterized some distinguished professors of medical science—

‘Pleased they listened, and were won.’

“In lecturing upon points of theory and practice, on which he held controverted views, he was singularly eloquent. Gradually rising with the subject, his voice would assume a depth and power that gave evidence of the faith that was in him, while his gestures added to the effect which his discourse produced. Nor were his powers of illustration less remarkable. In lecturing upon fever, on croup, on tetanus, and scarlatina, diseases upon which he held opinions peculiar to himself, and, indeed, in advance of most of his professional brethren, the cases with which his portfolio was stored were exceedingly interesting and impressive. The general reader may form some idea of the manner in which he illustrated his subjects, by the example which we subjoin. At one time during his professional career, scarlet fever prevailed in New York as an epidemic, and had attacked several of the family of General Alexander Hamilton. The General, who was in public office, was at the time absent from the city, although information was communicated to him, from time to time, in reference to the state of his family, but he was at last summoned home, by an urgent letter, informing him of the hopeless condition of one of his children. He started immediately, and after a fatiguing journey in winter, arrived during the night at his sorrowful home. He proceeded immediately to the sick-room

of his child, where, to his inexpressible joy, he found his little son in a sweet sleep. Being informed of the change wrought, and of the means by which it had been effected—a spirit and ammonia bath,—refusing all importunities to take repose, the General repaired immediately to the adjoining chamber, where Dr. Hosack had retired to rest, after several fatiguing and sleepless nights. Being awakened from his slumber, what was his surprise to see the form of General Hamilton, the friend and companion of Washington, kneeling at his bedside, and returning thanks to his God for his merciful interposition. The General said, in his most impressive manner, and in accents that showed his deep emotion, that he could not lie down until he had taken him by the hand and expressed his heartfelt gratitude to him who had been a ‘ministering angel’ in restoring his child to him. To Dr. Hosack, the interview, with the accompanying circumstances, was overwhelming, and was ever remembered by him as among the most gratifying compliments and acknowledgments he had ever received. ‘*Laudari laudato viro,*’ must ever be, to the generous mind, the highest species of praise, and this he had indeed received. In his lectures upon scarlet fever, he always cited this interesting incident, with a view to elevate the profession, by exhibiting to students that medical science and unceasing exertions were ever duly appreciated, adding, at the same time, that ‘such heartfelt gratitude, thus expressed, was worth more than any pecuniary compensation whatever.’ A friendship, cemented under such interesting circumstances, survived till death, and was conspicuous on every occasion; in none was it more so than when he accompanied his illustrious friend to the fatal field, when he fell in his unfortunate duel with Colonel Burr, a conflict which carried dismay to the hearts of our citizens, and which was mourned by the whole nation, as the untimely fall of a great man, who had devoted his time, his talents, and his energies to the great cause of Liberty.

“It will be easily perceived that a course of lectures, illustrated by cases so interesting and instructive, would be highly attractive to the youthful student, and was eminently calculated

to cheer him onward in the rugged path of his professional career; but when we add to these his clear voice, his gestures, and his animated countenance, the effect was indeed conspicuous.

"Many of the views which Dr. Hosack entertained have since been adopted by the profession; others have been considerably modified. He had pointed out the use of the stethoscope, but he did not attribute to the beautiful study of auscultation the importance which it has since acquired; but his treatment of fever, of croup, of tetanus, of scarlatina, and many other diseases, will ever remain as enduring evidences of his skill and research. As a clinical lecturer, he brought to the bedside the same methods of quick perception, close investigation, and sound judgment; he brought every resource of his art to wrestle with the fell Destroyer, and was ever ready to respond to the call of the afflicted. To the student he pointed out the marked and distinguishing features of the case, and, although pathological investigations were not then prosecuted as at present, still his great experience enabled him to point out with accuracy the character of the disease before him. His clinical lectures were clear, lucid, and practical, giving to the student such information as would serve him in the hour of need. He took a deep and abiding interest in his profession, and in all who exhibited a desire to receive information in its arduous and responsible duties. He lived in memorable times, before the great men of the Revolution had passed away; had seen and conversed with the most eminent of the age; had listened to the inspired song of Burns, tuned to sweet cadence, from his own lips; was intimate with Rush, and Gregory, and Sir Joseph Banks, and was the friend of Clinton and Hamilton.

"His career will ever remain to the youth of our country a bright example of the influence which industry, talent, and energy have in the attainment of reputation and fame."

In looking over my father's correspondence, I found the copy of a letter in his handwriting, addressed to his friend Dr. James, of Philadelphia, in reply to one requesting information from him as to the authorship of the "Farewell Address of Wash-

ington," which had been attributed to General Hamilton. Dr. James had been induced to seek this information from my father, from the well-known intimacy existing between him and General Hamilton, and, as every fact concerning the history of these two distinguished personages—General Washington and General Hamilton—will be of the greatest interest to future ages, I deem it important to give publicity to it here, by subjoining a copy of it.

NEW YORK, July 9th, 1826.

MY DEAR FRIEND:—

I am gratified by your communication of the 6th inst., to learn that Mr. Rawle has received satisfactory information from Governor Jay upon the subject of General Washington's Farewell Address, and which I believe you will find to correspond with the statement I gave you verbally when I was last in Philadelphia. As I then stated to you, I happened to be at the house of General Hamilton, making a professional visit to one of his family, on the morning he received from General Washington the outline of his contemplated address, written upon several sheets of foolscap paper, and requesting General Hamilton's opinion and views relative to that subject. I shall never forget the gratification displayed by the General upon receiving this high compliment from his great chief. I was afterwards informed by my friend, the late Nathaniel Pendleton, one of the executors of General Hamilton, who at the time possessed some of the General's papers, that he had seen the valedictory address in the handwriting of General Hamilton, by which it appears that the suggestions and alterations which he had made, were so numerous and so extensive as rendered it necessary for him to transcribe the whole. This fact, I believe, has been the origin of the report that the whole production had been originally written by General Hamilton.

Any person acquainted with General Washington and the productions of his pen, must have known that he was distinguished for those powers of mind, that correctness of judgment, that decision and pride of character, that original thinking and readiness in committing his thoughts to paper, and in which

his simplicity and neatness of composition may almost bear comparison with the most classic writers of the age, that he would not have committed a subject of that magnitude exclusively to any man living. But while the same ability would prompt him to execute the outline, his high respect for and confidence in the distinguished abilities of his friend Hamilton, long a confidential member of his family, would induce him to avail himself of the counsels of the latter in the completion and details of so important a document as the legacy he has left to his beloved country, and indeed to the world.

I am, my dear friend,

Very truly yours,

DAVID HOSACK.

As I have before observed, my father possessed the confidence of the community generally, to which he was fully entitled, not only from his skill and ability as a physician, but from his urbanity of manner, social disposition, and great decision of character, as well as for his uniform kindness to the poor. He never spared himself and was never known to shrink from what he conceived to be his duty. He observed with strict precision the numerous engagements of his profession, and was always punctual in his attendance in consultation with his fellow-practitioners, treating them with deference and respect; and if he differed from them in opinion, he would patiently listen to their argument, and if not convinced, he seldom failed to persuade them to his way of thinking.

So conscientious was he as a physician that I have frequently known him upon returning home late at night, fatigued after an arduous day's duty, feeling anxious about some patient, voluntarily to visit him, when his visit would be wholly unexpected by the family.

He was remarkable for his skill in diagnosis, having a quick perception and an almost intuitive tact in detecting disease, which I think may, in a great measure, be attributed to the fact that he always acted upon first impressions, as the mind is then most free from bias. He was indefatigable in his habits

of industry, for he always spent hours in his study after the labors of the day, and seldom retired to rest until after midnight, either devoting himself to medical study, reading over the lecture he was to deliver the following morning, or answering letters to his numerous correspondents, professional and otherwise, which, with an extensive practice, shows a diligence and application seldom to be met with.

He was not the less known as a surgeon, having been a pupil of one of our most distinguished surgical practitioners, Dr. Bayley: he was, under his tuition, fully qualified for the practice of this branch of his profession; besides having, while abroad, availed himself of the ample opportunities afforded him, while in attendance at the hospitals in London and Edinburgh, of witnessing operations performed there by Mr. Earle, Abernethy, John Bell, and others.

Upon being appointed to the Chair of Surgery, he delivered, at the opening of the College of Physicians and Surgeons, in the city of New York, November, 1807, an introductory lecture, entitled, "Surgery of the Ancients." His authorities were, of course, those of the old writers in medicine, such as Hippocrates, Celsus, Galen, and others; he was consequently obliged to translate from the original languages in which they were written, the Greek and the Latin. This lecture contains many interesting facts in surgical history.

Being one of the surgeons of the Almshouse Hospital, he there performed many important surgical operations, done for the first time in America; among which may be cited that of tying the femoral artery at the upper third of the thigh, after the manner recommended by Professor Scarpa: this operation was performed by Dr. Hosack as early as 1808. He tied the same artery several times afterwards for aneurism. He introduced, as early as 1795, in American surgery, the operation for hydrocele by injection. He also contributed several valuable essays on surgical subjects and cases, such as, "Observations on Glossitis;" "Cases of Tetanus cured by wine, spirits, and brandy;" "Observations on Tic-Douloureux;" "Cases of

Anthrax;"* "Observations on Hemorrhage, and the removal of Scirrhus Tumors from the Breast." In this latter communication he dwells particularly upon the advantages to be derived from exposing the wound to the air, after operations, with a view of checking hemorrhage; a practice since claimed by Sir Astley Cooper,† of London, and Professor Dupuytren, of Paris.

He possessed all the physical requisites for a surgeon, and had he confined himself to this department of the profession, he would, doubtless, have been pre-eminent. His attention was, however, diverted to the more elaborate theory of medicine, to the abstruse reasoning of which he directed the best energies of his mind; being encouraged so to do by the offer made him, by the trustees of the College, of the Professorships of the Theory and Practice of Medicine, and Midwifery. The former of these he retained until the end of his professional career.

Another circumstance particularly connected with his early history, is that of seeking the society of his seniors, and of attracting them to him, as may be seen by the following kind letters from his distinguished preceptor, Dr. Benjamin Rush.

PHILADELPHIA, August 15th, 1810.

DEAR SIR:—

I shall this day put into the hands of Mr. Humphreys the Spanish translation of my account of the yellow fever in 1793, and a manuscript copy of Dr. Mitchill's letter on the yellow fever, accompanied with a letter from Governor Colden upon the same subject. They were found among the papers of my old master, the late Dr. Redman, and were given to me by his daughter since his death. The copy from which Dr. Coxe printed an extract of Dr. Mitchill's letter, perished in the printing office to which it was sent for publication. I beg you would return the copy herewith sent with the Spanish translation, which accompanies it. I thank you for the liberal

* For all these, see 2d vol. of "Medical Essays."

† See "American and Philosophical Register," vol. 4, p. 63.

manner in which you have dissented from my opinions upon the subject of your present inquiries. In the laudable attempts which are now making to improve the condition of mankind, I wish a society could be formed to *humanize* physicians. General Lee once said: "Oh! that I were a dog, that I might not call man a brother!" With how much more reason might I say, "Oh! that I were a member of any other profession than that of medicine, that I might not call physicians my brethren!"

I have lately treated a case of anthrax with bark and other cordial remedies, agreeably to your practice, with success. The inflammatory action in the bloodvessels, in that disease, partakes too much of the soap bubble to admit of the common antiphlogistic remedies.

Our city is unusually healthy. My wife and daughter are now in Jersey. Were they here, I am sure they would unite in cordial respects to you and your excellent lady, with, dear sir,

Yours sincerely,

BENJN. RUSH.

June 20th, 1812.

MY DEAR FRIEND:—

Our Philosophical Society meets but once a month in summer. They met last evening. Their next meeting will be on the *third* Friday of next month, which is, I think, on the 17th of the month; on which day, or before it, I shall expect to have the pleasure of taking you by the hand as my guest. All my family unite with me in requesting you to make our house your home while you remain in Philadelphia. Let us show the world that a difference of opinion upon medical subjects is not incompatible with medical friendships; and in so doing, let us throw the whole odium of the hostility of physicians to each other upon their competition for business and money. Alas! while merchants, mechanics, lawyers, and the clergy live in a friendly intercourse with each other, and while even the brutes are gregarious, and

"Devil with devil firm concord holds,"

to use the words of Milton, physicians, in all ages and countries, riot upon each other's characters! How shall we resolve this problem in morals?

With love to Mrs. Hosack and Miss Mary, in which all my family join,

I am, dear sir,

Your friend and brother in the republic of medicine,

BENJN. RUSH.

He also cherished a very pleasing recollection of his preceptors, from his grammar-school to the completion of his education, and had much pleasure in keeping up a friendly intercourse with them as long as they lived. In an obituary notice of the late Dr. Cochran, which appeared in a Canada paper immediately after the death of that distinguished scholar, after making mention of his virtues and high literary attainments, and of his having been Professor of Languages in Columbia College, the writer says: "There he had under his care several young men, who have since attained the highest reputation and distinction in the United States, and some of whom kept up a correspondence with him till a late period of his life. Among his pupils were the late De Witt Clinton and John Randolph, Dr. Hosack, one of the most eminent living physicians of the United States, the late Rev. Dr. John Mason, Chancellor Jones, and others."

Holding so conspicuous a situation as a leading practitioner, as well as being a Professor in the University, Dr. Hosack could not fail to interest himself in most of our public scientific institutions and charities, and was instrumental in establishing several of them. His love of botanical science induced him to found the Elgin* Botanic Garden, which he did at his own individual expense, as early as 1801. It was situated about three and a half miles from the city of New York. It consisted of about twenty acres of land on the middle road. It

* The name of Elgin was given to it, that town in Murrayshire, Scotland, being the birthplace of his ancestor.

was selected from its varied soil, as peculiarly adapted to the cultivation of the different vegetable productions. The grounds were skilfully laid out and planted with some of the most rare and beautiful of our forest trees. An extensive and ornamental conservatory was erected, for the cultivation of tropical and greenhouse plants, as well as those devoted to medical purposes, more especially those of our own country.

At this time there were under cultivation nearly fifteen hundred species of American plants, besides a considerable number of rare and valuable exotics. To this collection additions were made from time to time, from various parts of Europe, as well as from the East and West Indies. It was the intention of the founder of this beautiful garden, had his means been more ample, to devote it to science generally; more especially those of zoology and mineralogy. This, however, he was compelled from want of fortune to relinquish, hoping that the State of New York would, at some future day, be induced to carry out the plan as suggested by him, similar, in all respects, to that of the Garden of Plants in Paris; but in this he was disappointed. The State purchased the garden from him, but like many other public works, unconnected with politics, it was suffered to go to ruin. While it was in his possession it afforded him many a pleasant hour of recreation, and served to abstract him from the cares and anxieties of an arduous profession.

As early as 1792, by an essay published by him upon suspended animation from drowning, the corporation of the city were induced to co-operate with him in establishing an institution known as the "Humane Society." His friend, General Jacob Morton, a distinguished citizen of New York, known for his charitable and benevolent acts, lent his aid in the cause, and in speaking of Dr. Hosack, says: "But in the charities of life, in those services which carry comfort to the poor and distressed, was he eminently useful. To him the 'Humane Society' is indebted for its establishment. When he first joined it, it was called the Jail Society, and its services were confined to the supply of provisions to the prisoners in jail for debt. Upon his suggestion, and through his instrumentality, a charter was

obtained, extending the objects of its charity, and naming it the 'Humane Society.' A convenient soup-house was erected with the funds of the institution, aided by the corporation. Apparatus for the recovery of persons apparently drowned were procured, and distributed in several parts of the city. The soup-house department of this institution was extended to the relief of the respectable poor who chose to apply.

In the severe winters with which our city has been visited, this institution was eminently and extensively useful. A general direction was also given to the matron of the house never to refuse an applicant, so that our city might have the proud boast that "no one need perish from hunger." This institution existed in active operation for many years; the necessity of it has since been superseded by the liberal and more extended plan of our city almshouse establishments, and arrangements for our foreign poor.

The City Dispensary received no less his care and attention. It was principally through his exertions that it was remodelled, and became useful both as a charity and as a school for young medical practitioners. One of the principal features of this institution was the extension of vaccination to the poor; for almost immediately after its discovery by Dr. Jenner it was, through the interests of Dr. Hosack, fully adopted, as he was among the first, if not the very first, supporters of it.

In his discourse for the improvement of the medical police of the city of New York, delivered to the medical class in 1820, as introductory to a course of lectures on "The Practice of Physic," he urges the necessity of a separate and independent building for the reception of the sick poor afflicted with yellow fever or other epidemic diseases. He says: "I early in the past season called the attention of the Board of Health to this subject, and recommended, upon the first appearance of typhus fever in our city, the instantaneous removal of the sick either to Bellevue or some other suitable place to be provided.

"I then earnestly urged upon the Board the necessity of some permanent provision being made commensurate with the increasing population of the city."

Dr. Hosack, being at that time the resident physician, induced the corporation to select a spot at Bellevue for the erection of an extensive fever hospital, which was accordingly done. The necessity for such an institution could not be doubted for a moment; we are only surprised that New York, abounding in numerous charities, is still deficient in such accommodation for the poor, to say nothing of the advantages to be derived to the health of the city by isolating diseases of a malignant character.

Additional suggestions are also made by him in this lecture deserving of notice. Of National Quarantine Laws he says: "It is an unavoidable inference from the view taken of the importation of fever, that nothing short of the most rigid system of quarantine laws, and those, too, executed by officers who conscientiously believe in their utility, will secure our cities from a repetition of the evils we have experienced. Nor can our country be effectually guarded against the renewal of yellow fever in our seaports, while our commerce continues with the torrid zone, unless the government of the United States shall, as has been done in Great Britain, institute a general system of quarantine regulations, to be strictly enforced in every commercial city of the Union. When, too, we take into view the late progress of the plague, and call to mind the introduction of that disease in former days into the cities of London, Marseilles, and Moscow, have we not reason to expect that our commerce with the Levant will, ere long, add another scourge to our country, unless we are protected by a code of health laws, to be alike operative in all our seaports?"*

This paper on Medical Police contains many other valuable suggestions for the further improvement of the sanitary condition of the city, such as the extensive establishment of sewers, and the substituting for wood, stone piers, erected upon arches; thereby enabling the current to force them from accumulation, which tended so much to the engendering of disease to our citizens. It was also a suggestion that the sewers should ex-

* See "Medical Police," p. 30 and 31, in "Medical Essays," vol. 2.

tend to the termination of these piers, and discharge their contents into the channel. These suggestions will, as a sanitary regulation, no doubt at some future day, be adopted by the Board of Health, as necessary to the welfare of the city.

It has often been a subject of wonder to his friends that Dr. Hosack should have found leisure, in the midst of his various pursuits, to have contributed so much to the literature of his profession. This may be accounted for by his extraordinary method and system in the division of time. His leisure moments, if such they may be called, were always occupied by miscellaneous reading, as the works of his library will attest, most of them bearing pencil-marks and reference to some facts therein contained. It was also his habit from the commencement of his professional life to record in a note-book every fact, case, or prescription deemed by him of importance.

At an early period he commenced the publication of the "Medical and Philosophical Register," in which he was associated with Dr. John W. Francis, formerly a private pupil of Dr. Hosack, and for many years afterwards united with him in his practice. This Journal was issued quarterly, and each number contained a hundred pages and upwards.

He afterwards published three volumes of his "Medical Essays," containing addresses before the different societies, introductory lectures, biographical sketches and obituary notices of some of the most distinguished medical men of the United States, besides some of his most practical papers on vision,* scarlet fever, and contagion, &c. &c. It was observed by a distinguished foreign critic, in reviewing his various publications, that "he would rather be the author of Dr. Hosack's paper on the Laws of Contagion, than the writer of the ponderous quarto volume of Dr. Adams on Morbid Poisons," then a popular work of the day.

* This paper on Vision, for which he was highly complimented, was read by Dr. Pearson before the Royal Society of London. It contained many original views, showing, by experiments made upon himself and others, that the power of the eye to adapt itself to different distances, depended upon the action of the external muscles.

He also published an extensive appendix to a work on the Practice of Medicine, by Dr. Thomas, of Salisbury, England, in which are contained most of his views of the treatment of diseases generally. Adopting nosological arrangement, as a system best calculated to illustrate diseases, he was induced to prepare a work on that subject, which ran through several editions.

Dr. Hosack, being the intimate friend and associate of many of the distinguished men of our country, both literary and scientific, as well as of most of our eminent statesmen, could not, with his acute penetration and singular discernment of character, have failed in forming a correct appreciation of them. His intimacy and confidential friendship with Mr. Clinton, from his earliest boyhood through life, induced him, upon the death of that distinguished statesman and accomplished scholar, to pronounce his eulogy: this he did at the request of the public authorities and different literary institutions of New York, in many of which Mr. Clinton and himself had been so intimately associated. He felt honored by the appointment, and rendered that homage to his friend which was so justly his due.

This eulogy was pronounced, on the 8th of November, 1828, in the Middle Dutch Church, in Cedar Street, before a numerous audience, composed of the friends, partisans, and admirers of Governor Clinton. For the manner in which he acquitted himself on this occasion, I shall refer the reader to the following extract of a letter, written on the evening of the same day, by the late Chancellor Kent, the intimate friend of Mr. Clinton, who was himself not less distinguished for his talents and literary attainments, and whose name, associated with those of Marshall and Story, will be handed down to posterity as among the most eminent jurists of the age.

Saturday evening, Nov. 8th.

DEAR SIR:—

I had not a fit opportunity to speak to you, after you had finished your address, and I write this to tell you how much I

was pleased. Your manner was chaste and dignified; your utterance clear and distinct; the language was pure and elegant, and the matter judicious and instructive. The biographical details of the ancestry of Governor Clinton were very entertaining, and you went through the whole with great ability and success.

I congratulate you.

Yours sincerely,

JAMES KENT.

It occurred at a time when Dr. Hosack was most engaged in the various duties of his profession, and it was with difficulty he could find time to complete so ample a biography as he has offered to the friends and admirers of Mr. Clinton. Not being a political man himself, it required a very extensive and elaborate correspondence, on the part of Dr. Hosack, to obtain the necessary information from his political friends for such an undertaking. I cannot forbear stating the fact that the greater part of this work was written upon the backs of letters during his visits to patients whilst waiting to be admitted to the sick-room, so characteristic was this of his economy of time.

From the flattering notices of this work by the various journals and reviews, and also by complimentary letters from distinguished men from all parts of the United States, as well as from eminent statesmen on the other side of the Atlantic, he had every reason to feel gratified with the performance of the task.

SALEM, July 3, 1829.

DEAR SIR:—

It was not until a day or two since that I had the pleasure of receiving your present of the Memoir of Governor Clinton, and your accompanying letter. I am very grateful to you for this mark of your favor, and for the flattering terms by which you have made me feel it still more to be a personal favor.

The work itself is of high and permanent interest, and every way creditable to the country. You have discharged your duty to your friend, in a manner which confers at once honor on yourself and on his memory. It is praise from one who has arrived at the enviable distinction of being entitled to praise, *laudari a laudato viro*. I rejoice that so distinguished a statesman and scholar has thus found a biographer qualified to do justice to his merits, and I am quite sure that, with the public, his fame will acquire new strength and solidity from your successful labors. If men like Dr. Hosack will devote their time to such literary efforts, it will no longer be a reproach to American biography, that it is dry and dull, without animation, and without power.

I shall place your work in my library, among those which I value from a double motive,—for their intrinsic merit, and for the elevated rank of their authors in letters, as well as in their professions.

Believe me, with the highest respect,
Your much obliged servant,
JOSEPH STORY.

RICHMOND, June 13th, 1829.

SIR:—

Your polite and flattering letter of the 8th of May, with the truly interesting memoir which accompanied it, reached me a few days past. I have deferred acknowledging these favors until the adjournment of the court, which was at the time in session, should leave me at leisure to peruse your very valuable biography. I have now read it with attention and pleasure.

As an eminent statesman, and as the effective and energetic patron of the greatest public work in our country, Mr. Clinton has been long known throughout the United States; but you have introduced him to us in many other characters, in which his services, if less splendid, appear to have been equally important and useful. Nothing which could benefit humanity or

improve science seems to have been thought unworthy of his attention, or to have escaped his notice. You have shown him to possess many claims to our admiration which were unknown to your distant readers. You have made us acquainted too with many others, the ornaments of your State, whose benevolent deeds entitle them to the applause of their fellow-beings, and with institutions which the wise and humane could wish to imitate.

Have the goodness to accept my thanks for the very valuable mark of your attention, and my assurances of the grateful sentiments with which I received the kind and flattering expressions of your letter.

I am, sir, with very great respect,
Your obedient servant,
J. MARSHALL.

His public spirit was not less manifest in his donations to the different institutions. Having imbibed, whilst abroad, a taste for mineralogy, as well as for the collateral branches of medical science generally, he early began to form a cabinet of minerals. To quote from a sketch of his life by a friend: "He attended in the winters of 1793-94, the first course of lectures on mineralogy that was delivered in London by Schmeisser, a pupil of Werner. With this additional knowledge of mineralogy, which Dr. Hosack had begun to study at Edinburgh, he continued to augment the cabinet of minerals which he had commenced in Scotland. This collection was brought by him to the United States, and was, we believe, the first cabinet that crossed the Atlantic; it was afterwards deposited in Princeton College, in rooms appropriated by the trustees, but fitted up at the expense of the donor, similar to those at the *Ecole des Mines* at Paris. To render this donation immediately useful, it was accompanied by a collection of the most important works on mineralogy."*

* The specimens were systematically arranged and marked by Dr. Hosack soon after his return from Europe, assisted by the late Dr. Archibald Bruce, who was then his private pupil, and whose attention was thus first awakened to the subject.

He also made a liberal contribution to the library of Columbia College, consisting of several hundred volumes. The New York Hospital and Historical Societies profited much by his liberality.

In private life, Dr. Hosack was no less conspicuous for his social qualities and kindness of heart. His home was made a happy one, not only to himself, but to all who dwelt under his roof. His love of society induced him, as may be said, "to keep open house;" the stranger, of any claim to literature, or scientific distinction, as well as our own prominent citizens, partook of his hospitality, and always found a hearty welcome.

His constant professional engagements interfering greatly with his disposition and wish to entertain, induced him to set aside an evening in each week for the reception of his friends, and he selected Saturday for that purpose during the winter months. These evenings were always well attended, and are doubtless remembered by many still living as among the most agreeable and enlightened associations of the time. At these pleasant "reunions" were to be found the poet, the painter, the learned theologian, and eminent jurist, as well as all who were distinguished in medical science: it was a school for the young aspirant in every department of knowledge. Of the distinguished persons who were to be seen at these "conversaziones" may be enumerated the Abbé Corea, Andrew Michaux, Sir John Franklin, Dr. Richardson, Captain Sabine, Captain Basil Hall, Washington Irving, Fenimore Cooper, Bryant, Halleck, Chancellor Kent, Thomas Addis Emmet, Professor Silliman, Bishops Hobart and Wainwright, and De Witt Clinton.

During Dr. Hosack's professional career, he always took pleasure in fostering talent in youth, and from his knowledge of character and acute discernment, he seldom failed in his predictions of their future success in life. I can scarcely recollect the time when he was without some such *protégé*; his selection was always made among those whose want of means debarred them from obtaining the advantages of a liberal education. Those thus selected were educated in the profession of medicine; most of them were successful, and some became emi-

ment. The first of his adoption was, as early as 1797, a youth named John Charters, son of a carpenter: he evinced extraordinary intelligence, so much so, that my father was induced to take him into his family and to educate him in medicine, having himself previously instructed him in the Latin and Greek languages. He was very studious, and, by his diligence and application and desire to please, won my father's affection; but unfortunately he did not live to fulfil the high expectations formed of him: he fell a sacrifice to yellow fever by his devotion to the sick during the epidemic of 1798. My father was much grieved and disappointed at his death, and as a further expression of his affection and esteem, erected a tablet to his memory commemorative of his talents, industry, and estimable character. This monument was placed upon the wall of the portico of the Presbyterian Church in Nassau Street, the place of worship of his parents.

Not many years after the death of this young man, my father was induced to adopt another in his place, under somewhat similar circumstances: from the distinguished position which he has since occupied, I will offer no apology for making mention of the incident by which he first attracted my father's notice. In one of his early walks, when at his country-seat near the city, he observed a young man gathering flowers. Upon inquiring of him his object, he discovered him to be a young Frenchman, who politely apologized in French for the intrusion, saying that he was a botanist, which proved to be a sufficient passport, and was peculiarly gratifying to my father, who had always been so great an admirer of that science himself. After further conversation with him, and finding him to be an ardent follower of the system of Jussieu, he became much interested, and invited him in to breakfast: this was the only introduction, but it proved to be all that was necessary. The young man, in his interview with my father, informed him that his family had been obliged to leave France during the troubles of the Revolution, and he being desirous of pursuing his favorite study of botany in the wild fields of America, had emigrated to this country. The young man being poor, my father adopted

him in to his family, and educated him in the profession of medicine, as best calculated to give him a support. In due course of time, he graduated in the College of Physicians and Surgeons in the city of New York.

Upon the termination of the Reign of Terror, and the Empire being established, he returned to his native land, and became an *attaché* to the *Jardin des Plantes* in Paris; here he attracted the notice of some of the most eminent botanists of that country, so much so, that when the Emperor was organizing his *corps de savans* of the army of Egypt, our young friend was particularly recommended to him as best qualified for the department of botany. The Emperor gave him an interview, and asked many questions, such as, where he had studied his profession, where he had acquired his knowledge of plants, &c. His answers doubtless must have surprised the Emperor, who, at that time, could have had but a very imperfect knowledge of the United States. Indeed, it is creditable to our country that a young man at that early period should have been here educated in the profession of medicine, and have been prepared to occupy so important a situation, and still more surprising that he should have been chosen from among the many who, it might have been supposed, had enjoyed superior advantages. Nevertheless, such was the fact, and he proved to be not only an honor to the appointment, but to the French nation, now proud to place his name among the most learned and scientific of their countrymen; this person is Professor Delile, of the School of Medicine at Montpellier, and Superintendent of the *Jardin des Plantes* in that city.

I cannot forbear stating the circumstances of my visit to him in 1836, when in Europe. In my tour in the south of France, I went to Montpellier, principally for the purpose of visiting Professor Delile. I arrived at the hotel in the afternoon, and the following morning at five o'clock, I walked through the *Jardin des Plantes* to his residence. The servant conducted me to his private apartment. He was just then engaged in examining some flowers with the microscope, turning from which, he saw me, and appeared quite surprised—he doubtless saw the

resemblance to my father. He said in English, "I know you, sir; you are the son of Dr. Hosack," and at once threw his arms around my neck. He was unable for a moment to speak. After wiping away his tears, he exclaimed, "Is it possible!" After many rapid inquiries about my father and family, and old friends, long since dead, he pointed to a chest in the corner, which, he said, had never been out of his room: it contained, as he showed me, his notes upon my father's lectures, and his correspondence with him since his return to France. He overwhelmed me with his kindness, insisting upon my making his house my home, which invitation I regretted being compelled to decline, as my stay was but for a few days. I, however, passed most of my time with him: he accompanied me to every place of interest, hospitals, colleges, &c., and appeared to be much gratified in introducing me to his colleagues, Professor Serre and Professor Lallemand, the two eminent surgeons of the south of France.

The reflective pleasure which this distinguished gentleman derived from my presence, and the great emotion he evinced upon recalling the pleasing associations of his early friend and preceptor, are beautiful exemplifications of sincerity and gratitude. He was as proud of my father as my father was of him.

It was formerly, more than at present, the prevailing opinion that the study of anatomy, and medical science generally, tended to unsettle the mind, and frequently led to atheistical principles: so far from this being the fact, it has a direct tendency to awaken reflections of a very serious character, and if doubt of the great First Cause should exist in the minds of any one, it must be dispelled by contemplating the infinite beauty of our organization, the harmony and extraordinary combination of matter to sustain life and resist disease. In the language of a celebrated naturalist, we might exclaim, "O God! how thy works infinitely surpass the reach of our feeble understandings; all that we actually know of Thee, or ever can, is but a faint and lifeless shadow of thy adorable perfections, in contemplation of which the highest understandings grow bewildered!"* Many,

* Swammerdam.

therefore, who study medicine are frequently more strongly impressed with the truth of religion, and are induced to relinquish the pursuit of the former to enlist under the banner of the cross. I could cite several who were educated as private pupils of my father, who have since become distinguished divines, and ornaments to the church of their adoption. Though this may not be attributed to any influence which he as preceptor may have exerted upon the minds of his pupils, yet he never failed in his teaching to show his reverence for, and entire belief in, the truths of religion, and to express his high admiration of the works of the Creator.

An interesting incident occurred in the case of a young *protégé* of my father, which it may not be out of place to mention here. During a severe snow-storm in 1815, in the morning, a poor young man, badly clad, about seventeen years of age, appeared at the door asking for alms. My mother, meeting him in the entry, and hearing his pitiful story, invited him in, and ordered a breakfast for him. He was quite overcome at her kindness, and when he sat down to his repast said grace over it. My mother, questioning his sincerity, interrogated him further; he assured her he had not partaken of a meal for twenty-four hours, and could not do so without first thanking his Maker for having conducted him to such hospitality and kindness. He then said that he would be a faithful and devoted servant if she would allow him to remain under her roof. He had left a happy home, and was in this country a stranger without friends. Her sympathizing heart was moved by his importunities, and with my father's consent he was allowed to remain in the family in the situation he solicited. My father, at table, with a view to improve his children, often interrogated them upon their studies. On one occasion a question in geography arose which his children were unable to answer. This young man, though in the capacity of waiter, forgetting his position, prompted the one to whom the question had been put. This attracted the notice of my father, who feeling regret that a young man so well informed should hold so menial a situation, determined to place him in the office, and to have him taught

to prepare and compound medicines and deliver them to patients, as was the custom with physicians in those days before the establishment of druggists in the city of New York.

He was accordingly taken into the office, and at his own request was permitted to attend the examinations and lectures delivered to the students.

After a year or more, being treated as a companion by the gentlemen in the office, he became careless and indifferent to the duties assigned him, and for some cause, now forgotten, my father was compelled to part with him. Many years elapsed before he was again heard of.

One evening, in the fall of the year 1831 or 1832, a well-dressed gentleman, of a clerical appearance, called upon my father, and related to him the following narrative. He stated that he had recently arrived from England, and was on his way to Canada, to take charge of his congregation there, one of the largest in the provinces. His principal object in passing through New York was to see his benefactor, to obtain his forgiveness, as well as to inquire after the welfare of the family, mentioning them all individually. He said he had waited in the city a week or more, trying to make up his mind to call and see him, knowing it was a duty he owed to himself as well as to one who had been so kind to him under the most trying circumstances; but he had not the moral courage to do so, and he determined to leave the city without carrying out his resolution. On arriving at the steamboat on his way to Canada, he there saw my father, who was, as he conjectured, going to his country-seat at Hyde Park. He reproached himself for his erroneous decision, and ordered his baggage back to the hotel, to await the return of Dr. Hosack to the city, his winter residence. He called immediately at the house to ascertain when he might be expected, and was informed that he would be in town in a day or two. At the expiration of that time he called, and was happy in now finding him at home. He said his name was P—— I——, and hoped that he was not altogether forgotten. He recounted most of the incidents as before related by me, and then went on to state that he was

thankful that he could not impute to himself any crime for leaving, but was discharged for sufficient reason, which he would not now mention, Dr. Hosack appearing to have forgotten it. He was quite distressed to find that he was not recognized, and said he was sure the Doctor's children would remember him. I happened to be at my father's house at the time, and was asked by him if I had ever known such a person, giving his name. I answered affirmatively, and at his request accompanied him to his library, and there saw a tall stately gentleman, whom I recognized as the individual spoken of. He was quite delighted to see me, and then continued to relate the further circumstances of his life. After leaving New York, he said he had experienced many hardships and privations, and had it not been for the interest taken in him by a kind-hearted clergyman in Canada, he would have been lost forever. While under his roof, he was awakened to more serious reflections, and by diligent application and perseverance was prepared for the ministry, and upon returning to England, was there ordained. His father, in his absence, had died, and to his surprise he found he had inherited an ample fortune. After a little further conversation he took an affectionate leave of us, and departed to fulfil his mission. This little incident, so full of interest, shows benevolence of heart and kindness; while it is creditable to the recipient, it tells well for the religious feelings which prompted him so to humble himself.

After the death of my mother, my father was again married to Magdalena, widow of Henry A. Coster, a lady much esteemed for her amiable and excellent qualities.

Some time after this event my father retired from the profession, with the intention of devoting himself to agriculture and rural life.

It is an old saying that "professional men live well, work hard, and die poor." As a general rule, it would seem to be correct; applicable alike to law, physic, and divinity. If an exception occur, it affords the individual thus favored facilities to entertain and keep around him his old associates and friends, and to do honor to the elevated position he naturally assumes

in the community generally. He lives to enjoy, in a retrospective view, his past well-spent life, honored and revered before retiring from this world. If constant occupation have prevented him from disseminating the knowledge acquired by experience, an opportunity is now afforded him of doing justice to himself by furnishing to the world the result of his labors.

Dr. Hosack, after a life of nearly fifty years spent in the arduous duties of the profession of medicine, retired to his beautiful residence at Hyde Park, Dutchess County, situated on the banks of the Hudson, where he passed his remaining years, devoting himself to agriculture in all its various departments. He carried with him the same ardor and zeal which had been so characteristic of him in his professional career. He introduced into the country many of the finest breeds of cattle, sheep, and swine, which he imported at great expense from abroad. The grounds were cultivated in the best possible manner, and the most esteemed fruits and vegetable productions of the country were made to thrive in the greatest luxury possible. His extensive farm was indeed a model one, and from its widespread reputation attracted many strangers from different parts of the Union, as well as from abroad, to visit it. The pleasure-grounds were arranged with great taste and skill, and are thus described by some of the distinguished persons who have written travels in this country. Mr. James Stewart, of Scotland, says: "The splendid terrace over the most beautiful of all beautiful rivers, admired the more the oftener seen, renders Hyde Park, as I think, the most enviable of all the desirable situations on the river. The grounds are very charming, and the views from them very picturesque and striking, in which the Catskill Mountains form a bold and remarkable feature."

Miss Harriet Martineau, in her work on this country, observes: "I felt that the possession of such a place ought to make a man devout, if any of the gifts of Providence can do so. To hold in one's hand that which melts all strangers' hearts, is to be a steward in a very serious sense of the term. Most liberally did Dr. Hosack dispense the means of enjoyment he possessed. Hospitality is inseparably connected with

his name in the minds of all who ever heard it, and it was hospitality of the heartiest and most gladsome kind. Dr. Hosack had a good library, I believe one of the best private libraries in the country; some good pictures, and botanical and mineralogical cabinets of value. Dr. Hosack drove me around his estate, which lies on both sides of the high road, the farm on one side, and the pleasure-grounds on the other. The conservatory is remarkable for America, and the flower garden all that can be made under present circumstances; but the neighboring country people have no idea of a gentleman's pleasure in his garden, and of respecting it. On occasions of weddings and other festivities, the villagers come up into the Hyde Park grounds to enjoy themselves, and persons who would not dream of any other mode of theft, pull up rare plants as they would wild flowers in the woods, and carry them away. Dr. Hosack would frequently see some flower that he had brought with much pains from Europe, flourishing in some garden of the village below. As soon as he explained the nature of the case, the plant would be restored with all zeal and care; but the losses were so frequent and provoking as greatly to moderate his horticultural enthusiasm.

"We passed through the poultry-yard, where the congregation of fowls exceeded in number and bustle any that I have ever seen. We drove round his kitchen-garden too, where he had taken pains to grow every kind of vegetable which will flourish in that climate. Then crossing the road, after paying our respects to his dairy of fine cows, we drove through the orchard, and refreshed ourselves with the sweet river views on our way home. There we sat, in the pavilion, and he told me much of De Witt Clinton, and showed me his own life of Clinton, a copy of which, he said, should await me on my return to New York. When that time came he was no more; but his promise was kindly borne in mind by his lady, from whose hands I received the valued legacy."

Captain Hamilton, the author of the "Peninsular Campaign," and "Cyril Thornton," &c. &c., also makes mention of his visit to Hyde Park, and thus expresses himself:—

"I accepted the very kind and pressing invitation of Dr. Hosack to visit him at his country-seat on the banks of the Hudson. The various works of this gentleman have rendered his name well known in Europe, and procured his admission to the most eminent philosophical institutions in England, France, and Germany. For many years he enjoyed, as a physician, the first practice in New York, and has recently retired from the toilsome labors of his profession, with the warm esteem of his fellow-citizens. I reached Hyde Park in a heavy snow-storm; but the following morning was bright and beautiful. The snow, except in places where the wind had drifted it into wreaths, had entirely disappeared, and, after breakfast, I was glad to accept the invitation of my worthy host to examine his domain, which was really very beautiful and extensive. Nothing could be finer than the situation of the house. It stands upon a lofty terrace overhanging the Hudson, whose noble stream lends richness and grandeur to the whole extent of the foreground of the landscape; below, its waters are seen to approach from a country finely variegated, but unmarked by any peculiar boldness of feature; above, it is lost among a range of rocky and woody eminences, of highly picturesque outline. In one direction alone, however, is the prospect very extensive; and in that—the northwest—the Catskill Mountains, sending their bald and rugged summits far up into the sky, form a glorious framework for the picture.

"Dr. Hosack was a farmer, and took great interest in the laudable but expensive amusement of improving his estate. He had imported sheep and cattle from England, of the most improved breeds, and, in this respect, promised to be a benefactor to his neighborhood. I am not much of a farmer, and found the Doctor sagacious about long horns and short legs in a degree which impressed me with a due consciousness of my ignorance. The farm-offices were extensive and well arranged, and contained some excellent horses.

"I visited Hyde Park again in the month of June. I now beheld its fine scenery adorned by the richest luxuriance of verdure. Poet or painter could desire nothing more beautiful.

There are several villas in the neighborhood, tenanted by very agreeable families, and had it been necessary to eat lotus in the United States, I should certainly have selected Hyde Park as the scene of my repast."

After such flattering descriptions of my father's home, it is not surprising that his life was now one of continued enjoyment and happiness. His habit of early rising, which, during his professional career, had been acquired from the necessity of toil and labor, now became that of unalloyed pleasure. The song of birds, the hum of bees, and the sweet perfume of flowers springing into renewed life before the rising sun, and gentle breezes of the morn, while it delighted the senses, could not fail to exert a benign influence upon a mind so well stored and fully prepared to admire

" Nature, for Nature's sake alone."

To him it was an inestimable blessing, and one which he enjoyed to its fullest extent.

In the autumn of 1835, Dr. Hosack removed as usual with his family to his city residence, and a few weeks after was seized with apoplexy, which terminated his existence. On Friday morning, the 18th December, 1835, he rose as usual in his wonted good health. After breakfast, he made one or two calls in the neighborhood for the purpose of transacting business. On his return home, he found he was paralyzed in his right arm. Upon entering his parlor, he calmly signified by signs, as his speech was confused, his actual condition to some members of his family. I was immediately sent for: perceiving his situation, and in obedience to his request, I took from him eighteen ounces of blood, and directed a bed to be prepared for him in the same room. His symptoms increased, his articulation became more indistinct, and finally unconsciousness and stupor came over him; the usual treatment in such cases was pursued, but without effect. He lingered in this state until Tuesday, the 22d December, when he ceased to live, expiring without a struggle, and surrounded by his affectionate and devoted family. Dr. Hosack had attained his sixty-sixth year.

Some three or four weeks previous to his last illness, my father in conversation with me, said to me that he had a conviction that he would either be attacked with apoplexy or paralysis, and that the period was not far distant, and that the attack would be on the right side. So confirmed was he in this belief that he told me he intended to practise writing with his left hand, in order that he might make known his wishes in such an event. A few days after this conversation, when in his study, he handed me a note from a friend, which he said had been written with his left hand, he being paralyzed: he then made an attempt himself. The subject being a painful one to me, I discouraged further discussion of it. He continued to entertain the belief that the fatal disease was hovering over him, and acting under this impression, he stopped at the jeweller's, and ordered several rings with his hair set in them, which he presented to his children. I never could discern a reason for his adopting such a belief, as he appeared to me as well as I had ever known him. The conviction that death was so near did not disturb his tranquil mind, or affect his spirits in the least. He received every attention during his illness from his professional friends, Dr. J. W. Francis, Dr. W. J. Macneven, Dr. Alexander H. Stevens, and Dr. George Wilkes, who in his devotion and kindness seldom left his bedside.

His funeral took place on Friday, the 25th of December. His remains were taken to Grace Church, where the Episcopal service for the burial of the dead was read by his friend and former pupil, the Rev. Dr. Ducachet, of St. Stephen's Church, Philadelphia, who, upon receiving the sad intelligence of his death, came to New York for the purpose of assisting in the last ceremonies over the remains of his late preceptor. His body was deposited in the family vault at the Marble Cemetery in Second Street.

Dr. Hosack was educated a Presbyterian, his parents being members of that church. His children were also christened in that faith, but afterwards he was induced to give the preference to that of the Episcopal service, and though not a communicant,

he observed its forms and ceremonies, and was a regular attendant upon church until his death.

His death was noticed at the time by all the journals of the day, with appropriate and eulogistic remarks. I will offer no apology for transcribing a few lines which appeared in the "National Intelligencer," communicated by one who had been his pupil, and a resident in his family, and who now, like himself, slumbers in the grave.

"The death of Dr. Hosack may be considered as an additional bereavement to the city of New York, and indeed to our country, as few men have contributed more than he to elevate the character of the medical profession in the United States, and to the general encouragement of science, literature, and the arts. His regular and methodical industry, and his kind though decided deportment, which immediately inspired confidence in those who had not previously tested his skill, raised him early in life to eminence and fortune; and he employed the advantages thus honorably acquired in a manner which rendered them beneficial to the whole community. Endowed by nature with a generous disposition and a taste for intellectual pleasures, his house was the seat of hospitality and refinement.

"There the polished European met with a society not inferior in accomplishment or elegance to any which he had left beyond the Atlantic, while the most humble individual, who had any claim to notice, from his efforts in the advancement of knowledge, or of the interests of humanity, received a welcome, and frequently found a friend. To his example and his judicious aid, many, if not all of the scientific and benevolent institutions of New York owe their origin and success. He devoted his time to them, he gave them funds, and he distributed among them precious collections of books and of objects in the various departments of natural history, in the formation of which he had spent years, and from which he could not have separated himself without regret, in order that they might thus be rendered more accessible to the public."

The portrait, as originally designed by me, is now complete. I have endeavored to place upon the canvas every trait that

might tend to illustrate the man. How far I have succeeded in depicting the true features of his character, must be left for those to determine who knew him well and appreciated his worth. I am aware that many of his intimate friends and former pupils, like himself, have long since paid the debt of nature common to us all; yet many still remain who enjoyed his society, and who can bear testimony to his talents and virtues; to them this short memoir may prove interesting.

ALEXANDER EDDY HOSACK, M.D.

THOMAS C. JAMES.

1766—1835.

By the rule that "whatsoever things are honest, whatsoever things are pure, whatsoever things are of good report," are to be thought of, honored, imitated, Dr. James may claim a high place in the regard of posterity, as he certainly was held in veneration and esteem by his contemporaries.

Perfect in his bodily proportions, dignified in his carriage, possessing features of the purest style of manly beauty, from which radiated not only the expression of a highly gifted intellect, but the manifestations also of a kindly, generous, noble heart, he ever arrested the attention of the passing stranger as a citizen worthy of honor; while those who knew him most intimately prized him most highly, and found each added year of acquaintance, and every opportunity for more close and searching investigation of his character, to give additional assurance that he was one whose ingenuous nature had survived its contact with the world, and whose guileless truthfulness justified the confidence which was reposed in him by the entire community in which he dwelt.

The paternal ancestry of Dr. James was Welsh. A band of earnest, honest, Christian men, followers of George Fox, embraced the offers of perfect toleration made by William Penn, and, making large purchases of land in the province of Pennsylvania, migrated with their families to the yet unexplored wilderness, to establish there, amid the privations incident to the New World, homes in which their posterity might hold in peace, principles which in the Old World shut them out from

privileges which they valued only less than their sense of duty to God. Agriculturists in the Old World, they retained their fondness for the same pursuits in the New; and a belt of outlying townships, to which they lovingly gave the familiar names of the different parts of the Principality from which they severally came, still surround Philadelphia, and transmit to succeeding generations the evidence of the source from whence their fathers sprang. From this stock arose the James, Cadwalader, Lloyd, and other families, associated in each generation with the best society of Philadelphia, and furnishing to each the medical men, who discharged with fidelity the trust reposed in them.

To this stock belonged Abel James, the father of Dr. James. Settling in Philadelphia, he became an active and successful merchant, one of the number of those whose privilege it was to give to the mercantile character of the city a position which certainly has never been excelled. Enterprising in their undertakings, zealous in their efforts, honest in their principles, highminded and honorable in their transactions, they earned for themselves a name, which was adorned by a modest and simple deportment, and a liberal and generous style of living, appropriate to the ample fortunes which were the fruit of their industry. The substantial city residences, and spacious country mansions now swallowed up by the ever-increasing growth of the city, were not the only tokens of their taste. The choicest editions of the best authors of the period were imported freely, with the more bulky cargoes of the ships which crowded the wharves, and found among them a ready sale. Mr. James had collected what, at that time, would have been thought a handsome private library even in the mother country; thus proving the possession on his own part of an elevated and refined taste, which he transmitted to his children, together with the appliances for its cultivation. Holding the first rank among the merchants of Philadelphia, he cheerfully united with his fellow-citizens in the patriotic determination to sacrifice their present interests by resisting the encroachments on their liberties as Englishmen, made by the government of the day; and met the attempt at

"taxation without representation" by the agreement to abstain from the importation of the products of the industry of England. When the struggle for Independence took place, of resistance to oppression, Mr. James withdrew from the city to an estate in the vicinity belonging to his wife; where, according to contemporaneous testimony, "he found employment for half the village of Frankford in rebuilding the family-seat, where he kept open house and a plentiful table, at which the traveller was hospitably entertained, while the wandering beggar freely partook with the servants." One of the popular legends of the Revolutionary War relates, that at the juncture when the fortunes of our country were at the lowest ebb, the Federal treasury exhausted, and Washington, with a handful of men whose term of service had expired, was conducting his masterly retreat through New Jersey before the forces of Lord Howe, he appealed to Congress for a certain sum of hard money, which was absolutely essential to the existence of the army. Robert Morris, who was at the head of the Committee on Finance, meeting Mr. James in the street, was asked by him, "What news?" to which he replied, "The news is that I am in immediate want of a sum of hard money, and that you are the man who must procure it for me; your security to be my note of hand and my honor." Though a "Friend" and non-combatant, Mr. James at once did what scarcely any other could have done, advanced the money and relieved the embarrassment of the country.

The friend of Benjamin Franklin and a member of the American Philosophical Society, he was among the earliest and most prominent promoters of the many efforts for the improvement of the province which had their origin at that early period. He was a member of the Provincial Assembly, and as such was appointed on a committee to examine the possibility of a project to establish a commercial connection with the northwestern country by the medium of a canal to unite the waters of the Western Lakes with those of the Delaware and Schuylkill; while the construction of bridges, lighthouses, and other means of promoting the facilities of access to the city, in which he took an active interest, proved his enlarged and liberal views.

Such was the paternal ancestry of Dr. James. His mother was a daughter of Thomas Chalkley, widely known as an eminent member and minister of the Society of Friends. Through both father and mother he inherited an honorable name, and from them he received an education and training in conformity with the principles which governed their own actions.

Thomas C. James was born in Philadelphia in the year 1766, being thus nearly the coeval of his friend and coadjutor, Caspar Wistar. Like him he received a good classical education at the "Friends' School," where he was the pupil of Robert Proud, the historian. It was the purpose of his parents to provide him with the most ample facilities for the cultivation of his powers, and he chose the medical profession as that which presented both a strong incentive to intellectual culture, and the widest field for the application of philanthropic energy. Having completed his scholastic course he commenced his medical studies under the direction of Dr. Adam Kuhn, himself a pupil and friend of Linnæus, and then Professor of the Practice of Medicine in the University of Pennsylvania. It had been the intention of his father, and his own hope, that he should prosecute his studies still further in the schools of Europe; but the proverbial vicissitudes of commerce, falling ever with most force upon the most enterprising in the pursuit of business, prostrated the fortunes of his father; while his mother, with a high feeling of honor, willing to sacrifice everything to preserve the reputation of her husband for integrity, threw her own patrimony, which was handsome, into the fund for the liquidation of his indebtedness. Young James thus found himself at the very outset of his career called to imitate the virtues, and illustrate the principles which had been instilled into his childhood. The dissipation of his cherished hope only stimulated him to increased exertion. Instead of abandoning his plan for enlarging the stores of preparation, he took his degree of Bachelor of Medicine from the University in the year 1787, when he was only twenty-one years of age; and accepting the position of surgeon on board a vessel bound to Canton, with which port

the merchants of Philadelphia at that period carried on a large and lucrative trade, he, by a judicious mercantile adventure, secured the means for the accomplishment of his cherished wish,—to prosecute still further his medical studies: while he at the same time was promoting the same result by the opportunity thus afforded for observation of foreign climes and manners, as well as by the experience of the year's practice of his profession. With the means thus acquired, he repaired to London about the year 1791, where he found his fellow-townsmen, Dr. Physick, pursuing his studies as a pupil of John Hunter, at St. George's Hospital.

Dr. James entered himself as a pupil in a lying-in hospital, under the care of Dr. Osborne and Dr. John Clark; and spent the winter of 1791-2 in London, in the study of his profession, while he also availed himself of the opportunities for elevating social intercourse which his parentage and connection presented. The following winter was spent in attendance upon the courses of the University of Edinburgh, though he did not remain to take a degree. Returning home, he reached Philadelphia during the summer of 1793, in time to participate in the anxieties, responsibilities, and perils of the fearful pestilence which, in the autumn of that year, devastated the city. A handsome piece of plate, presented to him by the Welsh Society of Philadelphia, as a token of their appreciation of his faithful services to their countrymen during that terrible epidemic, remains in his family to perpetuate the remembrance of his moral courage and professional skill.

We thus find him fairly launched on his voyage of life. There are few things more important to the young aspirant after professional distinction, than the knowledge of his adaptation to the one or the other of the several paths which lie open before him. The physician, the surgeon, and the obstetrician are equally members of the noble brotherhood of medicine. But for entire success in either line, special qualities of mind are requisite. We have seen that Dr. James, when in London, availed himself of the best opportunities presented there for the acquisition of practical knowledge of the obstetric art. Midwifery had been

taught in Philadelphia, it is true, for many years, by Dr. Shippen, and more than one of the older physicians was specially devoted to that branch of the practice. The feelings and habits of the community had not yet, however, been brought into accordance with just views of its pre-eminent importance. The lives of mothers and infants, and the happiness of husbands and families, were too frequently sacrificed at the shrine of a spurious modesty, which demanded that the hour of the greatest human anguish, and that in which is concentrated the sum of human hope, should be confided to the care and control of ignorance, too often combined with meddlesome and pretentious charlatanism, utterly without qualification to avert evil or afford relief. Dr. Dunlap, who was then the principal obstetric practitioner, though especially devoted to that branch of practice, was too frequently called upon only when nature had failed, and ignorance had done her worst. He was, moreover, getting old. No man could have been found with higher qualifications to step into the breach, and place the flag of the profession triumphantly on the high ground it has ever since sustained in this community than Dr. James. Bland and courteous in his manners, refined in his feelings, and delicate in his address, he carried with him a presence which invited the confidence of the female heart, and disarmed the repugnance to receive from the other sex the assistance which may be needed in the hour of maternal anguish, which innate modesty must always feel. His patient disposition was itself supported by the intellectual stores which he had accumulated, and which he could also render available to beguile the tedious hours of labor; while the tones of cheerful encouragement were mingled with expressions of sympathy, which at once soothed the fears and excited the hopes of the sufferer and her friends.

At the foundation of these qualifications were others still more important. He was calm and dignified, and had that self-possession which can legitimately spring only from the consciousness of having devoted himself thoroughly to the study of his art, and of having, with untiring assiduity, rendered himself master of all the stores of knowledge which had

been accumulated by the observation and thought of his predecessors. The extreme modesty of Dr. James led him ever to esteem more highly than he should have done, the merits of others when contrasted with his own; but when thrown on his own responsibility, and left to the acting of his own mind, his powers were always equal to any emergency.

Thus qualified for the post, he became the founder of the school of midwifery in this country. Dr. W. Shippen, Jr., had, it is true, annually delivered a few lectures on the subject, in connection with his course on anatomy; and, so early as 1797, Dr. W. P. Dewees had made an unsuccessful attempt to deliver a private course of lectures on the same branch. It was not, however, till after nearly ten years' practice that Dr. James, in conjunction with Dr. Church, delivered a complete course of lectures on the science of midwifery, connecting with it practical lessons on the art. In order to accomplish this object, he procured the establishment of the lying-in department in the hospital of the City Almshouse, accepting the onerous duty of attendance upon it, and admitted the students who attended his lectures, in sub-classes of three, to be present at each accouchement. So assiduous was Dr. James in the prosecution of this undertaking, that he had no sooner closed the first course, on the 2d of March, 1808, than he entered upon a second, beginning on the 10th of the same month. During three years, he continued to deliver two courses annually.

On the death of his first associate, Dr. Church, he formed a fresh alliance with one who was destined to an eminence as lofty in another branch, as Dr. James had acquired in obstetrics; and who even then afforded unmistakable evidence of the ability and eloquence which placed him subsequently, as Professor of Practice, in the front rank of American teachers. Dr. Nathaniel Chapman was, during several years, the able and accomplished associate of Dr. James, in the delivery of his course of lectures, and contributed largely to promote the establishment of the just claims of midwifery to stand on the same level with the other branches of the medical profession, an achievement for which we are chiefly indebted to Dr. James.

On the death of Dr. Shippen, who held the chair of midwifery in connection with that of anatomy, Dr. Wistar, who had during many years been Adjunct Professor, was elected by the trustees of the University to fill the vacancy. Recognising the importance of midwifery, and the necessity that it should receive more attention from the students than it would while it held a secondary rank, and was kept in an unnatural alliance with anatomy, Dr. Wistar communicated to the Trustees of the University his views on the subject, and urged upon them the necessity of the erection of midwifery into a separate chair. It was not, however, till after the lapse of two more years, with courses necessarily imperfect, that the Board acted upon this suggestion, and created a distinct professorship of midwifery. To this Dr. James was appointed, with Dr. Chapman as assistant professor. Even then, however, so gradual is the advance of light, the attendance upon these lectures was left to the choice of the students, who were attracted by the diligent and faithful teaching of James, and the brilliant eloquence of Chapman, though they were not obliged to submit to the examination of their knowledge on this subject in order to qualify themselves for the degree of M.D. Finally, in the year 1813, on the death of Dr. Benjamin Rush, who had held the Chair of Practice, Dr. Barton, Professor of *Materia Medica*, was advanced to the vacant chair, while Dr. Chapman was elected to that of *materia medica*, and midwifery was placed on the same footing as the other chairs, with Dr. James as the sole incumbent. He was at this time in the maturity of his physical and intellectual power. His personal appearance was highly attractive, his knowledge of his subject as great as that of any contemporary, and it was his privilege to sustain fully the honor of the post assigned to him. His lectures were the product of careful study and diligent preparation. They contained an accurate analysis of all the knowledge which had been accumulated by the labors of Smellie, and Denman, and Burns, and Baudelocque, combined with the results of his own observation and large experience. His manner of delivery was appropriate to the subject and the

character of the man. There was a quiet, unostentatious simplicity, which attracted the attention of the student and commanded his respect. Having thus secured, by long-continued, patient, and judicious effort, a proper appreciation of the value of obstetric science, Dr. James continued, during more than ten years, annually to interest, as well as to instruct, the large and steadily increasing classes which frequented the halls of the University of Pennsylvania.

But about the year 1825, the result of uninterrupted mental and bodily exertion, pursued by night and by day with little intermission, began to be manifest. There was first a mere tremor of the muscles of the right arm. This soon extended to the body generally; and finally so impaired his utterance, that it was with difficulty he could fill with his voice the amphitheatre in which he lectured. Unwilling that the large classes of students which then frequented the University course should suffer any injury from his failing strength, Dr. James made application to the trustees to appoint an assistant; and Dr. W. P. Dewees, who had become possessed of a wide reputation as a lecturer on midwifery in the Medical Institute established under the auspices of Dr. Chapman, was appointed by them to that post.

Upon him Dr. James gradually devolved the duties and honors of the chair, dividing with him the emoluments, until, in the year 1834, he resigned the professorship, from a conviction that his failing powers were inadequate to the toils and duties which were inseparable from it. The private practice of Dr. James had long been large and select, and it could not be but that his patients were warmly and devotedly attached to him. The same motives which induced him to resign his public duties, impelled him now also to curtail his practice. He had been, first as physician and then as obstetrician, one of the medical staff of the Pennsylvania Hospital during twenty-five years. It was my privilege, as resident physician, during the years 1825, 1826, and 1827, to enjoy the advantage of serving in the lying-in department under his care. Most faithful and assiduous was he in the discharge of his duties to the poor inmates of the ward.

He well merited the encomium of the Board, who, in accepting his resignation, tendered him "their acknowledgment for his long, faithful, and useful labors; and assured him of their cordial regard and best wishes."

Dr. James was deeply interested in everything which had a tendency to promote the advancement of medical science; and after having served the Philadelphia College of Physicians in various official relations, he was elected president of that body on the death of Dr. Parke, an office which he held till his death. To that body he made occasionally verbal and written communications on subjects which were always interesting and instructive. He was also associated with Drs. Hewson, Parrish, and Otto, as editor of the "Eclectic Repertory," which, during eleven years, disseminated among the medical men of this country important abstracts from foreign journals and books, then not accessible as now, while original papers on practical subjects were also added to the stores thus culled from other sources. The modest estimate of his powers, which was a strongly marked peculiarity of Dr. James, caused him to shrink from a large responsibility as a medical writer, and induced him to adopt as a text-book of his course of lectures the work of Dr. Burns, to the American editions of which he added many valuable notes, the expression of his own views as distinguished from those of the author.

Almost every young man of refined taste and cultivated intellect has, at some period of his career, ventured either more or less into the field of literature. It was so with Dr. James, and a select circle of his youthful associates. Minor poems and fugitive essays were published by him anonymously in the periodicals of the day. They served to beguile the hours of youth, and to confer on him the reputation of a man of literary acquirements. The same tastes and dispositions were marked features in his character through life. He was always fond of reading, and sought his relaxation in the companionship of books rather than in the social circle, from which he was too much inclined to withdraw himself.

He thus maintained his familiarity with the Greek and Latin

classics, was a good German and French scholar, and entered with the zest of congenial taste into the frequent perusal of the works of the best English writers of his own day as well as of the past. Botany was a favorite subject of study, to which he invited others by his precept and example. In the history of our own country, he took especial interest, and it was through his influence, and almost entirely by his fostering care, that the Pennsylvania Historical Society was organized, with the design of gathering the scattered fragments of local history before they should be irrecoverably lost.

In his private personal relations, Dr. James was signally blessed. At an early period he was united in marriage to a lady in every way adapted to make happy that home to which he ever retired as the centre of his delights and the focus of his affections. She was permitted to minister to his happiness and comfort during a period more prolonged than is generally allotted to this hallowed relation, and survived his death, which took place in July, 1835, after he had been several years withdrawn from any active participation either in the duties of the medical profession or the more general interests of life.

It has been the privilege of few to enjoy a larger share of the affectionate respect of the community in which they have dwelt; of none to sustain a more enviable reputation. To him might, with more propriety than to almost any other, be conceded the possession of the "*virtus repulsæ, nescia sordidæ*," of which it is said by the poet, "*intaminatis fulget honoribus*."

There are certain important relations of man which are too sacred to be subjected needlessly to the careless gaze of mere idle curiosity, or the ruthless investigation of prying impertinence, which may yet be exhibited on suitable occasions without any violation of the proprieties of life, or offence to the feelings of surviving friends.

The false assertion that medical men are prone to infidelity, has been so often reiterated that it has passed into almost axiomatic acceptance. There is no foundation for the calumny. The loftiest men in our profession have been as prominent for

their piety as they have been distinguished by their intelligence, ability, and professional attainments. An array of names might be presented, if this were the proper place to do so, carrying uninterruptedly, through each successive generation, the stream of those who have thus honored their nature by rendering honor to their God. It is no violation of propriety to record the fact that Dr. James was, in the strictest sense of the word, and in an eminent degree, a Christian man. Having been made sensible, by personal experience, of the necessities of his nature, he investigated carefully the relations of man to his Creator, and accepted, with the full assurance of intelligent faith, the offers of the Gospel as the only ground on which man can rest his acceptance with God. Not satisfied with this, he scrutinized with diligence the various diversities which mark the profession of this faith, and recognizing the common foundation of them all, in an active belief in the merits of a divine Saviour and the atonement of the Son of God, he clung to this as his own hope through life; and most truly did he adorn the doctrine, by his effort to imitate the character of Christ. It would be impossible to catalogue and arrange his virtues for display, or to analyze them for investigation. They may be summed up in the language of inspiration. He had "his fruit unto holiness." His philanthropy was extensive, embracing in its affections all the various human interests which claim the sympathy of man. Yet was it limited in its application by that discretion which is necessary to give practical value to what, without it, becomes a mere fruitless sentiment; or, what is worse, an erratic misapplication of power. He bestowed his pecuniary means with an unsparing hand. We may not raise the veil which he himself gathered in careful folds over the ceaseless daily operations of his charity, which, as a living principle, was ever renewed in its inexhaustible supply, and diffused daily its gentle and refreshing streams, causing joy and gladness to follow in his path.

There was no relation, as husband, father, brother, friend,

citizen, or man, which he did not adorn by the active virtues appropriate to each.

Such was he in life; and when that life drew to its close, it was with the mellowed light and rich drapery of the departing day, perfect in its beauty, awful in its majesty, sublime in its truthful simplicity.

After years of feeble health, borne with the patience of a Christian man, and some weeks of active disease, the sure precursor of dissolution, he called to his bedside those medical friends who had ministered, as best they could, to his necessities, and, with calm composure addressed to them his sincere thanks for what he was pleased to call their skilful and assiduous care; and then, recognizing the steady and near approach of the end of the relation which thus subsisted between them and himself, expressed his desire that they should sustain him in the hour of dissolution, adding, "It is a fearful thing, a very fearful thing, *to change this state of existence*, but my trust is not in works of righteousness that I have done, but in the mercy of God in the face of Jesus Christ."

Thus with characteristic abnegation of all personal merit, and with firm faith in his Redeemer, he passed from a world, each inhabitant of which might safely adopt the language: "*Sit anima mea cum illo.*"

CASPAR MORRIS

PHILIP SYNG PHYSICK.

1768—1837.

PHILIP SYNG PHYSICK was born in Philadelphia on the 7th of July, 1768; and died in his native city on the 15th of December, 1837, in the seventieth year of his age. Such is the brief and sole record of millions of human beings who arrive at and disappear from this earth, and of whom nothing else is cared to be known or remembered; and even this is, ere long, forgotten, as if it had been written on the sandy beach or traced out in rapid curves on the sea itself. The memories of a few are kept for a while by "storied urn or animated bust," while the deeds of others—how small in number compared with the multitudes of the unknown and forgotten—are handed down from age to age in the pages of history. Of these, some figure as destroyers of their species, conquerors as they are called; others, upturners of the social fabric,—nearly all creatures of insane ambition. Mixed up with these turbulent groups we meet with a few, a select few, the real benefactors of their kind, who quietly and unobtrusively, often with great labor and at a sacrifice of their own comfort, and sometimes of life itself, try their utmost to improve and elevate human nature, while administering the balsam, which carries with it health and peace. Some of this small, select class are physicians of the body, others of the mind; all are intent on good works, whether for the prevention or mitigation of pestilence, the substitution of knowledge and refinement for ignorance and barbarism, or of plenty for barrenness. Of this chosen number is the subject of the present biography, a man who in his day and generation did much to allay

and remove the sufferings, and thereby increase the happiness of his fellow-citizens, and whose fame will live after him in the pages of the history of the exploits of peace.

Edmund Physick, the father of Philip Syng, was an Englishman, possessed of considerable strength of mind, and noted for his strict integrity. He held office in the colonial government as Keeper of its Great Seal, and, after the Revolution, he became agent of the Penn family, and was intrusted with the charge of its estates. His wife, Miss Syng, and mother of Philip Syng, was the daughter of a silversmith: she was characterized by strength of intellect, correct judgment and decision. The son ever retained a lively and grateful recollection of the excellent qualities of his parents; and he was undoubtedly correct in attributing to their early lessons and example whatever was most estimable in his own character. A plant from a good stock and receiving proper culture can hardly fail to bear good fruit. It was by such an inheritance that young Physick, so soon as his calling in life was chosen or indicated for him, evinced that steadiness of aim and intentness of purpose, which, within the limits of reasonable ambition, seldom fail to insure success. Wanting them, the richest gifts of genius are of little avail, even if they do not actually mislead their possessor into erratic courses and by paths, in which the energies are weakened, and fail to produce the desired effect at the critical moment of struggle for the prize. Some of the chosen few may, indeed, like Byron, awake some morning and find themselves famous. Some, from an unusual and unexpected concatenation of circumstances, such as family influence, popular whim, and a lucky chance, may have fame thrust upon them; but it is only the fame of the hour, which serves them in no better stead for obtaining future confidence or abiding reputation, than did the effort of the "single speech Hamilton" in the House of Commons. It was his first and his last, and as such was more noticed, perhaps more noticeable. But no single speech or single act ever made a man a great orator or a great leader either at the council-board or in the field. Once on the topmost round a man becomes suddenly more conspicuous

than before; but to have attained that eminence was the work of time and of patient and laborious effort, of which, during its progress, the world does not always take the trouble to inform itself.

The father of young Physick was not prevented by his painstaking habits of business, and the accumulation of riches consequent on their exercise, from a watchful regard for the proper education of his son, or a liberal bestowment of money for the purpose. This would seem, indeed, to be the first duty and one of the chief pleasures of a parent solicitous for the welfare of his child; but it is not always so regarded, and we every now and then find that a liberal and even lavish expenditure in matters of household and personal adornment is not deemed to be at all incompatible with the closest economy, if not positive niggardness, in making a pecuniary return, we cannot say requital, to the teacher. Edmund Physick thought and acted differently; and believing the ordinary charges for tuition to be too low, he gave double the customary remuneration to the teacher of his son Philip, who was placed under the care of Robert Proud, the historian, principal of the Friends' Academy in Fourth Street, near Chestnut. As Mr. Physick resided in the country, seven miles from Philadelphia, on the banks of the Schuylkill, his son was introduced, as a boarder, into the family of Mr. John Todd, father-in-law of the lady who, as widow Todd, became the wife of James Madison, at the time a member of Congress, and afterwards President of the United States. Philip was allowed by his teacher to visit his parents every Saturday, and to remain with them until the following Monday morning; and in availing himself of this permission, he never failed to return in time to be present at the opening of the school, although sometimes his walk back to town was in very inclement weather. Thus early the boy evinced a punctuality which soon became a confirmed habit, forming, in after-life, one of the distinguishing traits of the man. It is but natural for us to infer that the scholar went through his lessons in the same methodical manner in which he performed his weekly visits to his parents and

returned to his school. From the Academy Philip was transferred to the classical department of the University of Pennsylvania, in which he continued his studies until he had reached his eighteenth year, when, in 1785, he took the degree of Bachelor of Arts. Of his schoolboy and college days, nothing has come down to us; no record or incident, illustrative either of precocity or genius in the recitation-room, or of scrapes or escapades, and follies or vices, which are so often the concomitants of genius, as to lead to the vulgar error that they are necessarily incorporated with it.

After a month's rest from study, the young bachelor of arts was received into the office of Dr. Adam Kuhn, then Professor of Materia Medica and Botany in the Philadelphia College of Medicine, a post to which he was first appointed in the year 1768, that in which Physick was born. The period of his medical pupilage under Dr. Kuhn extended to three years and six months. If there have been men who had an early and almost instinctive fondness for the profession of medicine, Philip Syng Physick was not of the number. He yielded, on this occasion, to the wishes of his father, and for this act of filial obedience he received, in after-life, an ample reward in fame and wealth. An initiatory scene in the Medical College in Fifth Street, opposite Independence Square, to which he was a witness, and which consisted in the preparing of a skeleton, was not adapted to make him either a follower of Esculapius or an imitator of Machaon. But his entreaties for an abandonment of his professional destination were urged in vain. They who knew and watched with admiration the calm, unwavering look, and steady hand of the great surgeon in the height of his fame, would hardly credit the fact of his almost fainting, and of his being obliged to quit the amphitheatre of the Hospital, when, at the instance of Dr. Kuhn, he had been taken by his father to witness, for the first time, the amputation of a limb.

In proof of his diligence as a student one trait will suffice. Having been recommended by his preceptor to study carefully "Cullen's First Lines of the Practice of Physic," he complied so fully with the advice as to commit the entire work to me-

mory. It must be considered a fortunate circumstance in the student-life of young Physick, that he did not conceive himself to have been born a surgeon, and was not bent on an exclusive devotion to surgery; for in such a case he would probably, as so many always do, have neglected to acquire a knowledge of the principles of medicine and a habit of looking over the entire domain of the science, so to see and appreciate the reciprocal connection of its several branches and the support which they give to each other. He was, happily, prevented from becoming a merely mechanical and jobbing surgeon, dexterous in the use of instruments, but ignorant of the conservative and recuperative powers of nature, and the assistance derived from medicine, by which the use of instruments and the mutilation of the patient are avoided. In the office of Dr. Kuhn, the young student went through a course of reading which must have had a good effect in liberalizing and enlarging his therapeutical methods and appliances beyond the mere empiricism which too often accompanies "pure surgery." We may grant that in many of the volumes read there was much useless lore; but is it certain that all the pretensions to positive knowledge, by the demonstrative methods of chemistry, microscopy, and statistics of the present day, will be sustained by the observations and experience of those who may be in quest of the truth a century later. Is it not probable that the students of that period, while receiving some of these recorded phenomena, after having subjected them to fresh scrutiny, as valuable aids to medical science and proofs of progress, will still look back to the penultimate century, and to many centuries beyond it, for accurate physiognomical and life-like descriptions of morbid changes and sanitary recuperation, and of the effects of medicines and alimentary regimen, even although no chemical analysis had exhibited the constituent elements of the articles used in therapeutics and hygiene, or taught which were the essentials, and which the secondary or unimportant ones?

Young Physick did not confine himself to reading under the guidance of his preceptor, Dr. Kuhn; he also attended the lectures of the latter on materia medica and botany, and of his

associates in the College of Philadelphia; for it was not until the year 1789 that a union was brought about between this institution and the University of Pennsylvania, which had been chartered by the revolutionary legislature in 1778. The medical department of the Philadelphia College, the first organization of the kind in the then provinces, was founded, in 1765, by Dr. John Morgan and Dr. William Shippen. Its Faculty consisted, at the time of which we are now writing, of Dr. Shippen, Professor of Anatomy, Surgery, and Midwifery; Dr. Kuhn, of *Materia Medica* and Botany; and Dr. Rush, of Chemistry, and of Clinical Medicine in the Hospital. Dr. Morgan had withdrawn himself from the school, on the occasion of his entering the army in 1775, in which he acted for a while as Surgeon-General. He died in 1789. Although young Physick was undoubtedly an attentive listener to the prelections of the professors in the Philadelphia College, and turned his opportunities of medical instruction to the best account, yet he wisely declined to ask for the degree of doctor of medicine, and thus early, it might have been said prematurely, to assume the heavy responsibilities incident to the practice of his profession, until he had given himself a wider range for observation and more time for maturing his judgment. The father, fortunately coinciding with these views, gratified the longing desire of his son to visit Europe, and even went still farther by determining to accompany him across the Atlantic.

They arrived in London in January, 1789, and Mr. Physick, without loss of time, placed Philip under the care of John Hunter, so that he became at once a member of the family, and could be benefited by the continued teaching of this great surgeon and physiologist. How the young American, now in his twenty-first year, comported himself, and how he turned to account the great opportunities for instruction offered in the dissecting-room and the museum at the house of Mr. Hunter, and in the wards of St. George's Hospital, of which the latter was surgeon, may be inferred from his previous habits, and might readily be gathered from his whole life, even if there had not been contemporary evidence on this point. The first intimation of the course

of study which his preceptor wished him to pursue, was made in the Hunterian fashion—sententious, bordering on the abrupt, but quite explicit. It was given in a reply to a question from the father, what books it would be necessary for him to procure for his son? “Then, sir, follow me: I will show you the books your son has to study;” and leading the way from his own study to the dissecting-room, he pointed to several bodies, adding: “There are the books which your son will learn under my direction; the others are fit for very little.” The pupil received the advice in the earnest spirit in which it was given, and at once engaged in a course of dissections, in which he displayed so much neatness, as to win the favorable notice and approval of Mr. Hunter, whose confidence in him was farther manifested by making him an assistant in experiments, the useful deductions from which must necessarily depend on their being performed accurately, as well as recorded in good faith. The pupil became gradually the trusted friend of his teacher, who gave a practical evidence of regard, on the occasion of a vacancy in the post of house-surgeon to St. George’s Hospital. Among the many applicants to fill the vacancy, young Physick was the successful one, owing to the recommendation and exertions of Mr. Hunter in his favor. His term of service was for one year, which began on the first of January, 1790. We can easily conceive that the newly elected house-surgeon would, in this new field of labor, be continually alive to the importance of the duties devolving on him, as well as intent on acquiring a knowledge of practical surgery, the principles of which he was in the habit of hearing so ably expounded by his master. The Hospital was the school in which he prepared himself for the active exercise of his profession, at a future day, in his native city. There he became familiar with operations of the first class, and with minor surgery, including the apparatus and contrivances best adapted to the relief and cure of fractures and deformities. In fine, he learned to prepare himself for prompt action in sudden and unforeseen emergencies, and to adapt the treatment to the circumstances of each particular case. Of his self-possession and readiness of resources, he gave early

proof before the assembled class at the Hospital, by his prompt reduction of a dislocation at the shoulder-joint downwards, without the aid of an assistant or of apparatus of any kind.

By temperament, and early education under good parental example, young Physick was prevented from catching the impulsive ways and often rude manners of his great preceptor; for, with all his genius, industry, and habits of labor, John Hunter wanted self-control and amenity, as well as intellectual cultivation. At the instance of his brother, Dr. William Hunter, himself a good classical scholar, John, then twenty-five years of age, was entered as a gentleman commoner at St. Mary's College, Oxford, with a view to the probability of his afterwards becoming a physician; but neither this plan, nor the idea of his being an accoucheur, was pleasing to him, and he decided on restricting himself to the practice of surgery. His last and best biographer, Mr. Ottley, relates: "In speaking of this period of his life, some years afterwards, to Sir Antony Carlisle, then a student at the Hospital, Hunter said: 'They wanted to make an old woman of me, so that I should stuff Latin and Greek at the University, but,' added he, significantly pressing his thumb on the table, 'these schemes I cracked like so many vermin as they came before me.'" Posterity must always regret that the author of the great work on "The Blood, Inflammation, and Gun-shot Wounds," had not imbibed a little Greek and Latin, and acquired the concomitants of a correct style and dialectics. Then would its readers not be so often puzzled to make out his meaning, nor feel, in its perusal, that they are discharging a hard, albeit indispensable, duty. A few years before this time of contemplated university life, or in 1749 and 1750, we read of John taking the lead in rude sports and boisterous dissipation, and of his becoming a great favorite with that certainly not too respectable class of persons, the resurrection men. It is said that he displayed peculiar tact and vigor in assisting to damn the productions of unhappy authors, when he mingled with "the gods" in the one shilling gallery for the purpose. He does not seem to have acquired more polish after he became a married man. Mrs.

Hunter, sister to Mr., afterwards Sir Everard Home, is represented to have been an agreeable, clever, and handsome woman, a little of a blue stocking, and rather fond of gay society, to the occasional interference with her husband's more philosophic pursuits. He liked company, but it was of that kind from intercourse with which he could acquire knowledge, rather than from reading. Occasionally, he exercised his marital authority in a manner which was certainly at variance with the studied politeness of the old school, as it would be with *convenances* and "the rights of woman" at the present time. "On returning late one evening, after a hard day's fag, he unexpectedly found his drawing-room filled with musical professors, connoisseurs, and other idlers, whom Mrs. Hunter had assembled. He was greatly irritated, and walking straight into the room, addressed the astonished guests pretty much in the following strain: 'I knew nothing of this kick-up, but as I am now returned home to study, I hope the present company will retire.' This intimation was, of course, followed by an *exeunt omnes*."

The daily routine of practice was always irksome to Hunter, and even when he had acquired a lucrative and extensive business, he valued it only as affording him the means of pursuing his favorite studies. To his friend Mr. Lynn, he used to say, as he unwillingly laid by his dissecting instruments when called to see a patient, "Well, Lynn, I must go and earn this damned guinea, or I shall be sure to want it to-morrow." As a lecturer, the great English physiologist and surgeon did not shine, notwithstanding his admitted talents and his new and enlarged views of physiology and pathology and of the science of surgery. His hearers, we are told by his biographer, never exceeded twenty; another account makes the number thirty.

Amongst those who successively became members of Hunter's house, as private pupils, were Dr. Jenner, Mr. Grey, of Colchester, Mr. Kingston, Dr. Physick, and Sir Everard Home. Mr. Lynn, and Sir Antony Carlisle, although not living in his house, were received there on the most intimate terms, assisted in his dissections, and contributed valuable preparations to his museum. Dr. Jenner was among the earliest of Hunter's

pupils, having become one in 1770, when he was in his twenty-first year, and his preceptor in his forty-second. Their intercourse did not cease on Jenner's leaving London for Gloucestershire, but was kept up by letters until a few months of Hunter's death, which took place in 1798. Many of the letters written by the latter have been published in Baron's "Life of Jenner," and others are introduced into Ottley's "Life of Hunter." Though generally brief, and often faulty in orthography and grammatical accuracy,—some evidence of his escape from the thralldom of a university life,—they everywhere, his biographer remarks, show the vigor and originality of his thoughts and the untiring ardor with which he pursued his researches. He always felt the liveliest interest in the welfare of his old pupil; and Jenner, in return, never mentioned Hunter but in terms of regard and affection. His usual appellation for him was the "dear man." The matter of Hunter's letters was "for the most part of requests to his former pupil, Jenner, to procure for him various objects of natural history, which a residence in the country rendered easily attainable, or of directions respecting experiments to elucidate those inquiries into vital action in which Jenner was always ready to lend his valuable aid."

In reply to a request from the latter that his old preceptor would stand godfather to his first child, Hunter sent the following laconic and characteristic reply. It was dated January 29th, 1789, the year and the month in which Physick was enrolled as a pupil of Hunter.

"DEAR JENNER:

"I wish you joy; it never rains but it pours. Rather than the brat should not be a Christian, I will stand godfather; for I should be unhappy if the poor little thing should go to the Devil because I would not stand godfather. I hope Mrs. Jenner is well, and that you begin to look grave, now that you are a father.

"Yours sincerely,

"J. HUNTER."

By reference to dates given above, it will be seen that a pe-

riod of nineteen years separated the beginning of the student-life of Jenner from that of Physick under John Hunter,—a period, also, which expressed the difference in the ages of the discoverer of vaccination, and of our great American surgeon. This fact dispels the illusive picture drawn by Dr. Caldwell in his commemorative discourse on Dr. Physick, of the rivalry between the young Englishman and the young American under the eye of Hunter; as if, for the nonce, they represented their respective countries. The ingenious speaker was probably misled by seeing the names of Hunter's pupils collectively, as they are given in a preceding paragraph, taken from Ottley's "Life of Hunter;" but without specification of the time of their pupilage. The usual conditions on which he took pupils were the payment of five hundred guineas—about \$2645—and their being bound to him for five years. In the case of Physick, this rule must have been waived, as he only remained under Mr. Hunter's care two years and four months, or from January, 1789, to May, 1791: of which time one year was spent in St. George's Hospital as house-surgeon. In the first part of this period he attended regularly the lectures delivered by Mr. John Clarke and Dr. William Osborne on midwifery. It is very probable that the previous medical studies of the young Philadelphian were taken into account, as well as his intention to visit Edinburgh and spend some time there, after he should have left London. His age, he being in his twenty-first year when he was placed under the care of Mr. Hunter, was no bar to prolonged residence with his preceptor, whatever may be thought on the subject in these times of railroad speed in study as in everything else. Jenner, as we have seen, had attained this age when he became a pupil of Mr. Hunter. But we are not left to measure young Physick's professional knowledge and attainments by the standard of chronology or the actual length of time in which he had been studying medicine. Practical and unmistakable evidence on this point was given in the laudatory testimonials from the governing authorities of St. George's Hospital of his medical qualifications and correct deportment. They even went so far as to declare that the

institution was indebted to him for the zeal and ability which he manifested in the discharge of his duties for the relief of the inmates of the Hospital. In farther proof was the offer made to him by Mr. Hunter. This eminent man, conscious of his own great powers, and tasking them to the uttermost in his anatomical and physiological researches, could scarcely keep terms with mediocrity, either in his pupils or in his compeers in the profession. He was perhaps too ready in conferring his friendship on very young men if he perceived anything in their character which pleased him; but he was equally ready to throw them off again on finding them to fall short of what he had anticipated. He had every opportunity of becoming acquainted with his American pupil; first as a student continually under his eye, and next at St. George's Hospital, of which he himself was one of the attending surgeons. The scrutiny must have been as thorough as it was satisfactory, since it led Mr. Hunter to invite Physick to take up his residence with him, and to take a share in his professional business. Inducements of a prospective nature, looking to the permanent establishment of Physick in London, as a candidate for professional honors and emoluments, were also held out. In the event of his accepting the temporary offer, he would most probably have replaced Mr. Hunter in the practice of surgery, so as to allow of the latter devoting more time to his cherished studies in his anatomical cabinet and museum. Nor would he have foregone all assistance, even here, from his young partner, of whose neatness in dissection and whose dexterity in making preparations as well as in performing physiological experiments, he had already made satisfactory trials. In Part 1, Sect. 7, of his "Treatise on the Blood," &c., Hunter says: "Many of these experiments were made by Dr. Physick, now at Philadelphia, when he acted as house-surgeon to St. George's Hospital, whose accuracy I could depend upon." On these points, Hunter set a high value, and Home, for want of skill in them, used to come in for a share of abuse, accompanied by the remarks, "that his fingers were all thumbs; and that he never would have sense enough to tie down a bottle." All this was not meant to be taken literally. Hunter must have seen that his brother-in-law,

although not a person of brilliant parts, had stuff in him, some of which, it must be confessed, was bad stuff, as evinced later in life, when he was made the recipient in part, and borrowed and abstracted from the library of the College of Surgeons Hunter's MS., and sent forth paper after paper on debated questions of physiology as his own; although they were, in fact, those of his former preceptor and relative. To prevent detection, he had recourse to the very summary process of destroying the MS. of which he had made this use.

There can be no question of the entire success of Physick and the eminence which he would have reached had he remained in London. The road was open, and he possessed all the needful qualifications for travelling it with signal honor to himself, and for the benefit of a large number of his fellow-men. The annals of English surgery would then have exhibited his name in equal prominence with those of Astley Cooper, Abernethy, Carlisle, Home, and their younger contemporaries, Charles Bell, Brodie, Lawrence, Travers, Samuel, and Bransby Cooper, Guthrie, &c., not to speak of John Bell in Edinburgh, Hey in Leeds, and Carmichael and Macartney in Dublin.

Happily for American surgery and for the interests of humanity, Physick declined the offers of Mr. Hunter, and looked to his native city as the theatre on which to try his fortunes and exhibit his professional skill and attainments. We are told that he may have been influenced in his course by the fact that the air of London did not agree with him, in its probably subjecting him to repeated attacks of catarrh, to which he was prone through all his life. While in St. George's Hospital he had a severe attack of illness, for which no name has been given. It was so serious, however, that Mr. Hunter was on the point of writing to his father to tell him of the necessity of his son's returning home.

In parting from his preceptor and friend, who had given such convincing proofs of the strength of his regard, Physick must have felt deep emotion. He cherished in all after-life the memory of John Hunter, for whom he felt greater admiration, we may truly add, more profound veneration, than for any other man.

In the year 1791, Physick received his license from the Royal College of Surgeons in London, and in May of the same year, he repaired to Edinburgh with a view of procuring the degree of doctor of medicine. In the Scotch capital he turned to account the opportunities offered for instruction with the same zeal and assiduity that he had displayed in London; he attended regularly the medical lectures in the University, and visited with equal regularity the Royal Infirmary, then, as now, the chief clinical school in Edinburgh. Having complied with the requisitions of the University, which could not have been so stringent on the score of time of study as it now is, he took in May, 1792, his degree of M.D. after having written and defended a thesis "*De Apoplexiâ*." Dr. Randolph in his "Memoir on the Life and Character of Dr. Physick," speaks of the original manuscript copy of this inaugural essay in English, then in his possession, as evincing the great care with which it had been prepared. "It is divided into distinct chapters, and contains particular memoranda of the several authors to whom he wished to refer. The latinity of the essay was Physick's own; it was written without the assistance of that useful, and to not a few candidates for graduation in Edinburgh necessary, class of persons familiarly known as *grinders*." This independence of aid, on which many others, who would not like to be thought wanting in scholarship, did not disdain to rely, speaks well for the literary training of the bachelor of arts in the University of Pennsylvania, and also for the careful supervision of his early medical studies by his first preceptor, Dr. Kuhn. This gentleman, we can readily believe, encouraged, if he did not actually enjoin, him to include in his reading of the older writers those who had given their works a Latin dress, such as, for example, Celsus, Boerhaave, with "Van Swieten's Commentaries," Sydenham, Gaubius, Linnæus, Huxham, &c., names, at that time, looked up to with a feeling of deferential admiration. Considering the character of Dr. Physick's mind, and his indifference through life to belles-lettres, it is more than probable that it was from such sources as these that he derived the Latin for his thesis and his examination for a medi-

cal degree. It could not be said of him as it was of Gregory, perhaps with more playfulness than truth, that he read Cicero six times for Boerhaave once, while preparing his "*Conspectus Medicinæ*." Even at Edinburgh where there were no facilities, and, at the best, but scant means for the study of practical anatomy, he did not forget, during his short stay there after graduation, John Hunter's "books;" as we learn from his note-book, an extract from which is given by Dr. Randolph, in the following words:

"June, 1792. Prepared for the house-surgeon at the Royal Infirmary, Edinburgh, an *intussusceptio*, in which the ileum had passed into the colon, and at last dragged down six inches of the colon. Most probably there was a stricture formed about the termination of the ileum, near the valve, as there were strictures in other parts of the intestines. At present, a stricture of the ileum at this part certainly exists, but whether that did not arise from the binding of the inverted colon, and the inflammation consequent thereon, I am not sure. I was not present at the dissection of the body, and the person who took out the parts tore them very much."

Dr. Physick returned home in September, 1792, in the twenty-fifth year of his age, and the eighth of his medical studies, an age and a period the bare idea of passing through which would alarm our students of the present day. Too many of their number think themselves quite prepared by the time they are twenty-one years old and had studied medicine after a fashion during three years, some of them barely eighteen months of this period, to rush out into the world and to take on themselves the weighty cares and responsibilities of professional life.

If his biography be intended, as all biographies ought to be, for the instruction of the living, it will not be amiss for us to pause for a while before we follow Dr. Physick in his subsequent career to eminence and fame, and to inquire into the foundation on which he and his friends could reasonably rest their hopes of his future success. His was not the adventurous mind to catch at fame in her onward and sometimes capricious flight, nor the bold and self-confident one to compel fortune to do

his bidding, in spite of all opposition. No equipage of his rolled over the streets of Philadelphia to serve as an advertisement of the arrival of a young and promising surgeon, who, by implication, it must be supposed, had traversed the streets of London in a similar style in the carriages of its celebrities. There was no combination of overkind but not overscrupulous friends, who, trumpet-tongued, might proclaim his brilliant talents, and the wonderful operations performed by him in the hospital at London; none who, in a confidential whisper sent into the ear of every person whom they met, would tell of this patriotic man declining all the offers and prospective honors and emoluments with which he had been tempted to remain in London, and of his preferring to devote his skill and his labors to the benefit of his countrymen at home. He never could have been brought, by any stress of circumstances, either to countenance or in any way to give his aid to these devices; nor could he, in Cossack fashion, make daily sallies on the unsuspecting halt, and maimed, and blind, by following them into cellars and garrets and out of the way places, in order to beguile them into a consent to an operation, under iterated assurances that he would cure their infirmity and restore them to usefulness and to the world. He never boasted of his performing brilliant operations, with a view of getting his name up as a surgeon of great dexterity, who could take off a limb or cut out a tumor in the twinkling of an eye.

Dr. Physick must have felt conscious of resources within himself, superior to all those ephemeral claptraps. He had passed through a long period of probationary study, in which, first under Dr. Kuhn, he had made himself familiar with the medical classics,—the opinions and the practice of the great teachers of former times; and afterwards, under John Hunter, and in St. George's Hospital, he had become a thorough anatomist and a practical surgeon, intimate with the several organs and tissues of the body, and the changes which they underwent in inflammation, as well as with the most appropriate means of relieving all external injuries and lesions, both by mechanical aids and the use of the knife. He had learned, also, the necessity of restraining and removing inflammation, when occurring

either from traumatic lesion, or consecutive on an operation, and which, if neglected, might prove fatal. In listening to the lectures and private locutions of his great teacher, he became imbued with the doctrines of sympathy, which taught that external local injury affects often severely the internal organs, and that, inversely, the condition of these, particularly of the digestive system, will greatly modify, for good or for evil, the condition of the external parts and their lesions, whether these be wounds or ulcers. He had acted, in practice, on a knowledge of this sympathetic connection, for years before the appearance of the work of Mr. Abernethy on the Constitutional Treatment of Local Diseases.

Thus prepared by reading, by study, and by habits of observation, and mental and manual experience, and adopting principles in medicine only so far as they might serve for the condensed expression of positive facts, constitutionally calm and unimaginative, and trusting to no plausible conjecture or even large generalizations, Dr. Physick could wait patiently for coming opportunities for the exercise of his talents and the display of his available skill. It is for others to create the occasion; happy the man himself if he is on the spot at the opportune moment, and has the ability to turn it to account—a conjunction of circumstances this which is absolutely necessary, although often overlooked in our speculations on the different fortunes of two persons, who seemed, at the outset of life, to be equally capable of running the same career to eminence. The subject of this biography was not one who could invite others to his aid, and inspire them with much warmth of regard. He had not the ready smiles, the honied speech, the ready bow, and demonstrative manners, which would imply an eagerness to anticipate another's wish, covering all the while the hope to obtain the vote and influence of this other. His calm and dignified expression of countenance, occasionally overcast, even at that early day, with a shade of melancholy, his erect port, and measured gait, were not calculated to invite confidence, however well-adapted they might be to retain it.

A natural consciousness of his own great resources did not, however, prevent Dr. Physick from entertaining some anxiety, when

he found time gliding on without his being able to see a list of patients; nor was he entirely consoled by the kindness of his friend Mr. Prestman, whose well-stored library was opened to him during his leisure hours. The first step in professional business was an agreement which Dr. Physick, at his own instance, made with this gentleman and some others, to attend their respective families for the sum of twenty dollars a year.* Dr. Charles Caldwell, already alluded to,† represents the beginning of Dr. Physick's professional life to have been of a still more discouraging character, and he repeats the language which the latter held on this subject: "I walked the pavements of Philadelphia, after my return from Europe, for nearly three years, without making as much by my practice as put soles on my shoes, and such were my discouragements and dissatisfaction that I would have sold the fee simple of my profession for a thousand pounds, and never again have felt a pulse in the capacity of a physician." That Dr. Physick should have held this desponding language need not excite surprise. How many, who subsequently rose to eminence in the different professions, have expressed themselves in similar terms. Obstacles and discouragements belong to the history of genius, as we learn from the lives of nearly all who have won for themselves a name in the annals of fame; and it would seem, indeed, such are the contradictions in human nature, as if difficulties, in their being a spur to action, were an indispensable condition for success.

Undue stress has been laid on the alleged advancement of Dr. Physick's professional standing and income from the indirect effects of his services in the yellow fever of 1793. Reputation won by public services of any kind is seldom convertible into bullion, still less into the current coin by which a man procures his bread; and although it has been said that an epidemic disease

* Necrological Notice of Philip Syng Physick, M.D., delivered before the American Philosophical Society, by William E. Horner, M.D., &c. &c., published in Bell's Select Medical Library.

† A Discourse commemorative of Philip Syng Physick, M.D., prepared by appointment of the Faculty and Class of the University of Louisville, delivered January 12th, 1838.

is the harvest of the physician, experience tells a different story. So far from garnering an abundant harvest, they are rather gleaners of scattered and fallen grain, themselves exposed the while to pestilence, and subjected to the privation of sleep and meals, and all social pleasures. Not a few of them fall victims to the disease from which they are trying, at every cost, to protect or relieve their fellow-citizens. The survivors, it is true, get a vote of thanks, sometimes a piece of plate, sometimes a piece of poetry, for which they are expected to be profoundly grateful, and to feel that they have been richly rewarded for all their arduous labors. Literal folks and utilitarians, who have no feeling of the sentimental, may be inclined to take a different view of the case, and irreverently repeat Falstaff's question, "What is honor?"*

* The writer knew well, as if it were himself, a young physician (he is no longer) who, in 1824, attended daily, during three months, the sick with small-pox at the Bush Hill Hospital, and for a like successive period at the "Old Sugar House," in Eleventh below Spruce Street, and who gave from one to three hours of his time at each visit, according to the number and state of the patients. He also made post-mortem examinations of some of those who had died of the disease, and took notes of the changes in the organs as revealed in this way, in addition to the regular clinical record of cases. The Managers of the Almshouse, who had rented the Hospital at Bush Hill, for the reception of persons seized with small-pox, determined that such services should not go unrequited, and, accordingly, they passed an appreciative resolution, and actually voted that their physician should have the privilege of using the Almshouse Library. He made use of his privilege twice, by taking out a book each time, for reading and reference in preparing lectures; and after each time he was fined for keeping these books beyond the prescribed period. He was allowed to plead his case in person before the assembled wisdom of the Almshouse Managers, and after due discussion and deliberation on the part of these worthies, who might have been compared to the same number of Athenian dicasts, one of the fines was remitted, but he was obliged to pay the other, amounting, if he remembers rightly, to one dollar and three-quarters. This was the only pecuniary reminder of his daily services to the public, during a period of six months, in a line of voluntary duty in which he continually encountered the most repulsive and disgusting scenes. That they were so regarded by the worthy Almshouse Managers, was evinced by a little incident which occurred during his attendance at the hospital. A committee of the Board, five in number, if memory serves, had been appointed to visit the hospital, and assure themselves

A strange mistake has been made both by Dr. Horner and Dr. Randolph, in their respective notices of the life and services of Dr. Physick. When they speak of the part he performed as physician in the hospital at Bush Hill, during the period of the yellow fever of 1793, we are told by them that he had offered his services, and was chosen physician of the hospital. Dr. Horner says: "He left his lodgings in town, entered immediately upon his new duties, and continued in the exercise of them until the disease had passed away." Dr. Randolph relates: "He immediately proceeded to the performance of his duties with the most singular ardor and ability; and during the time he remained in the hospital, rendered services which were acknowledged to be of the most important character, and which served to secure to himself the approbation and esteem of the community at large." Both statements are entirely erroneous. Dr. Physick did not stay in the hospital, and he made but a few visits to the sick who were in it; nor had he, at any time during the period in which it was open

that the inmates were receiving suitable attendance on the part of all those on whom the duty devolved, The Doctor, on his arrival in the afternoon, the usual time for his visit, found the committee in the apothecary's room, seated round the fire, for it was in the winter time, and the weather was very cold. After the customary greetings had been exchanged, during which the Doctor expressed his pleasure at the visit of these vigilant and devoted guardians of the poor and the sick, he invited them to go with him in his round. He led the way, in company with a member of the committee, and was about entering one of the wards, or rather rooms, which contained the sick, when all of a sudden his companion stopped short, drew out hastily his pocket-handkerchief, and applying it to his nose and mouth, exclaimed in a hurried tone: "Doctor, they—they seem to be—quite comfortable here—yes!—quite," the speaker himself retreating while thus expressing his satisfaction, very much as Dominie Sampson showed his regard for Meg Merrilies. It was in vain that the Doctor pressed him and his colleagues, who were a little in the rear, to come in and examine for themselves: the rear guardians were content to echo the words of their leader, and with similar handkerchief demonstrations, they all made good their retreat. The report of this committee, at its next meeting, was worded in terms of commendation of the medical and other attendants on the hospital, and no doubt had its full share in inciting the Managers to the extraordinarily liberal return which they subsequently voted for the Doctor's services.

for the reception of patients with yellow fever, in 1793, the exclusive medical charge of the institution.

The facts in relation to the attendance of physicians at the Bush Hill hospital are briefly these, as derived from the "*Minutes of the Proceedings of the Committee*," who were appointed at a meeting of the citizens, September 14th, 1798, to aid the overseers of the poor in relieving the sick and distressed; and who had the entire control and direction of the hospital, from this date until that of its closure, January 12th, 1794. The building, which was the property of Mr. William Hamilton, had been taken, and was opened as a hospital, August 31st, 1793. By whom the physicians were appointed at this date we do not learn; but in a minute of the first public meeting of the citizens, held at the City Hall, September 12th, the mayor, Matthew Clarkson, in the chair, "Mr. James Wilson, an overseer of the poor, reported the situation of the sick and poor at Bush Hill, and that Dr. Physick, Dr. Cathrall, Dr. Annan, and Dr. Leib, are the attending physicians at that place." It appears from the account of Drs. Cathrall and Physick to a committee appointed to confer with them, as reported at the adjourned public meeting, September 14th, that the hospital was in a wretched condition, "without order or arrangement, and far from being clean," and that it was destitute of competent nurses and attendants. Stephen Girard and Peter Helm,* the first a member of the committee to whom had been made over the charge of the hospital, and the second a member of the general

* The names of the benevolent individuals who consented to take on themselves the onerous and dangerous duty of serving as a committee "to superintend the business at Bush Hill, and to agree with and appoint the necessary officers at that place," ought to be emblazoned in the history of Philadelphia, and be made familiar as household words to every successive generation of her citizens. They were: Israel Israel, Mathew Carey, James Swain, Andrew Adgate, Thomas Savery, John Connelly, Stephen Girard, Jacob Weaver of the Northern Liberties, James Ward, and John McCulloch of Southwark. Two at least of the Committee, Mathew Carey and Stephen Girard, were adopted or naturalized citizens, neither of whom would be thought worthy, by a recent political party, of a seat in the councils of the city, nor to hold in it any office of trust or honor!

committee, "commiserating the calamitous state to which the sick may probably be reduced for want of suitable persons to superintend the hospital, voluntarily offered their services for that benevolent employment." The offer was accepted, and they entered immediately on the exercise of their new functions; the internal arrangements being superintended by Mr. Girard, the out-door business by Mr. Helm. These gentlemen were thenceforward known as "managers of the Bush Hill Hospital," and to them was conceded the control of all its affairs. Their first visit confirmed the representations of the physicians, and made them acquainted with a truly deplorable state of things in the hospital. To use the language of Matthew Carey, in his interesting "Account of the Malignant Fever lately prevalent in Philadelphia, &c., January 16th, 1794:" "A profligate, abandoned set of nurses and attendants—hardly any of good character could at that time be procured—rioted on the provisions and comforts prepared for the sick, who, unless at the hours when the doctors attended, were left entirely destitute of every assistance. The sick, the dying, and the dead were indiscriminately mingled together. The ordure and other evacuations of the sick were allowed to remain in the most offensive state imaginable. Not the smallest appearance of order or regularity existed. It was, in fact, a great human slaughter-house, where numerous victims were immolated at the altar of riot and intemperance. No wonder, then, that a general dread of the place prevailed through the city, and that a removal to it was considered as the seal of death." An amended and, indeed, a new condition of things was soon brought about by the executive ability and energy of the managers of the hospital, Stephen Girard and Peter Helm, who, on the 16th of September, only two days after the statement of the deplorable disorder which prevailed in it, report, "That the hospital is now fully furnished with officers and attendants, except a few nurses; that the necessary arrangements are made, and that the sick are amply furnished with the necessary supplies and accommodations; and that the business is now so far matured as to afford every assistance necessary at

such an hospital." On the following day, Stephen Girard reported, "that the hospital is advancing fast towards order and regularity, and that more effectually to promote the objects of the committee, there ought to be a place procured for the accommodation of the convalescent." This recommendation was acted on forthwith, and the barn on the Bush Hill property, "a large, commodious stone building," as it is described by Mr. Carey, was divided into three apartments for the purpose; "one occupied by the resident doctors and apothecary; one, which contained forty bedsteads, by the men convalescents, and the other by the women convalescents, which contained fifty-seven."

The historian of the fever, just quoted, tells us, in the same page: "The sick were visited twice a day by their physicians, Dr. Deveze and Dr. Benjamin Duffield, whose prescriptions were executed by three resident physicians and the apothecary." This brings us, after an introduction which we are sure no reader will wish that we had omitted, to a specification of the part which Dr. Physick took in the medical services of the hospital at Bush Hill, in the year 1793. We shall soon see that this was inconsiderable, and for a short time only. The announcement of the names of the medical attendants on the hospital when it was first opened, and at the time when the committee of aid and relief took charge of it, and the statement just quoted from Mr. Carey's "Account," show that considerable changes must have taken place in the medical department within a very short period. In detailing the circumstances under which they occurred, we shall not pretend to scan the motives and feelings of the parties concerned.

Mr. Girard, on the same day that he reported, as above, on the state of the hospital, made an additional report, in conformity with instructions at a preceding meeting, when Dr. Deveze had "offered his services as a physician in such part of the hospital as may be assigned to his care." The Doctor was referred to the managers, who were to make an inquiry into his abilities and character, and it was resolved, "that if they should prove to be such as to justify his being employed, that

when the committee shall go into the appointment of physicians, he have a post allotted to him." Mr. Girard's report, growing out of this reference, was, "that Dr. Deveze had visited the hospital; that he appears to be a professional character, and that from the information he has received of his abilities and practice in Cape François,* from persons who are intimately acquainted with him at that place, he believes him well qualified to perform the duties of a physician at the hospital at Bush Hill." Whereupon it was resolved that the Doctor be desired to give his attendance at the hospital.

James Kerr is desired to provide a horse and chair for the use, and to be at the command of Dr. Deveze. This gentleman had only arrived in Philadelphia on the 7th of August, 1798. We read in the minutes, that at noon of the same day, September 17th, "the managers of the hospital returned from thence, and offer it as their opinion 'that a physician should be appointed to attend constantly at the hospital,' and report also, 'that a number of patients are admitted after the visiting physicians have returned to the city, who have no relief till the next day at eleven o'clock, and thus many suffer for want of the above regulation.' Which being taken into consideration, it was resolved that a physician be employed who will give his constant attendance, and this as soon as possible." It was likewise "resolved that the physicians attending the hospital be requested to meet the committee to-morrow morning at nine o'clock." A list is given at this meeting of the names of nine female nurses, including Ann Beakley, matron; and of ten male attendants who were engaged by the managers. It is also stated that Mary Saviel, having offered her services as an assistant matron to the hospital at Bush Hill, and bringing with her good testimonials of her abilities, sobriety and attention as a nurse and matron, was recommended to the managers; "and, if it be agreeable to them, that she be immediately employed, and that her pay be three dollars per day."

At the meeting of the Committee, September 18th, it was

* A number of the unfortunate refugees from this part of St. Domingo, arrived in Philadelphia in July, 1793.

"resolved that the managers of the hospital at Bush Hill have the entire direction of that place; and that they be empowered to employ and discharge such persons as they may think proper." We shall repeat now in the very words of the minutes of the Committee, all that transpired respecting the course pursued by and towards the physicians of the hospital.

"The physicians, agreeably to notice, attended, viz., Doctors Physick, Cathrall, Leib, and Annan; when a conference was had respecting the state of the hospital, and the mode of affording medical assistance.

"After some time spent upon the subject, the physicians produced the following propositions:

"1. That the physicians will attend regularly every day at eleven o'clock in the morning.

"2. That for this assistance, they shall have two guineas a visit each.*

"3. That Mr. Graham be prescribing apothecary, to attend to those patients who are admitted in the absence of the physicians, and that he be provided with two or more assistants in the apothecaries' duties.

"4. That Drs. Leib, Physick, Cathrall, and Annan have the entire direction of the hospital, to be arranged in such manner as they shall think proper; and that, in case of the indisposition of either, he will provide a medical friend to attend for him.

"Which being considered was agreed to, with the addition of the following, viz.:

"That a room at the hospital be appropriated to the use of such patients as are desirous of being under the direction of Dr. Devere. That he procure the necessary medicines for his patients, to be made up at the expense of the Committee; and, if necessary, that he provide a person to administer them." In another part of the minutes we read: "Drs. Cathrall, Leib, and Physick attended at the hospital this day."

On the next day, September 19th, the managers of the

* Equivalent to nearly ten dollars and a half.

hospital inform the Committee that they have received a copy of the resolution of yesterday relative to the appointment of physicians ; and having given it due consideration, are of opinion that it will not be productive of the benefit desired, and having offered several forcible objections to the mode, the resolution of yesterday was reconsidered and rescinded by the Committee, and it was agreed " that the patients be separated into two divisions, that each division have a distinct appointment, and that the nomination of physicians be left to the managers, Stephen Girard and Peter Helm.

" Doctor Deveze attending the Committee, and being recommended by the managers as a suitable person to attend as physician for one division, it was agreed that he be appointed accordingly.

" Dr. Physick also attending, it was agreed that he be appointed to the other part, the Doctor desiring to have till tomorrow to consider the subject, which was approved."

Three physicians, viz., Drs. Physick, Leib, and Annan, attended at the hospital this day.

September 20th. " Doctor Physick attended the Committee, and informed them that he is willing to take charge of one-half of the Hospital, which was agreed to ; but the compensation to him, as well as to Doctor Deveze, was by their desire deferred until a future time."

On the same day, however, we read, a little farther on in the minutes, of yet another change in the distribution of duties to devolve on the physicians of the hospital. " Doctor Physick being present, the consideration of the state of the hospital, and the most eligible mode of affording medical aid was again entered upon. After considerable time spent upon the subject, it was agreed that it would be most advisable to divide the hospital into three divisions ; that there be three physicians appointed ; and that the committee immediately proceed to an election of physicians to attend the hospital, agreeably to the regulations now concluded on ; when Doctors Physick, Leib, and Deveze were duly elected. The Secretary is directed to inform them of their election, and to request their attendance to-morrow morning at nine o'clock."

Another day brings another change. The minutes of the meeting of the Committee on the 21st September, after the usual entry of "Stephen Girard and Peter Helm at the hospital," run as follows: "A letter was received from Doctors Leib, Cathrall,* and Physick, which was read, in which they declined accepting the appointment at the hospital under the resolution of yesterday. The Secretary is directed to inform the Managers at the hospital of the receipt of their letter, and that they need not expect the attendance of the physicians this day; and to desire them to proceed to the care of the sick, and to endeavor to obtain the necessary medical aid which their situation may require."

The opening record in the minutes of the Committee on the next day is to this effect. "The Managers attending this morning inform the Committee that they have received the letter from the Secretary, and taken the necessary care of the sick, and that there is no cause for uneasiness about medical aid, as Doctor Deveze is, with the assistance of the apothecaries, fully capable of performing all the duties of the place, until the numbers shall considerably exceed those now in the hospital."

In another paragraph, near the close of the minutes of the same day, it is stated that "Doctor Benjamin Duffield offered his services to assist at the hospital at Bush Hill, which are accepted,—Agreed, that the thanks of the Committee be presented to him, and that he be furnished with a chaise or other carriage to aid him in his benevolent undertaking." At length after six days of deliberation and of resolutions made and modified, and on one occasion rescinded, as when the number and names of the physicians who should attend the hospital were specified, it was settled that Doctors Deveze and Duffield were to take the entire medical charge of the sick in it. The former was the chief physician, the latter acted in conformity with the opinions and rules of practice of his older and more experienced colleague; and henceforth we read of no farther difficulties in

* We do not learn from the minutes why Dr. Cathrall is said to refuse an office to which the records make no mention of his having been elected.

the *personnel* of the medical staff of the hospital. Doctor Duffield's name appears in subsequent records, in which he makes, from time to time, reports on the state of the hospital and the number of the sick then in the building. This, we may suppose, was owing to the greater facility with which he could discharge this duty than Dr. Deveze, whose knowledge of our language was, most probably, at that time very imperfect.

On the 27th of September, Dr. Duffield reports to the Committee, "that the hospital is in good order, that there are ninety-five patients in the hospital," and again, on the following day, "that there are one hundred and six patients in the hospital." An announcement at the present day of this number of persons sick with yellow fever, at the same time and under one roof, would try the nerves of the good citizens of Philadelphia, although the proportion of the sick to the well would be nearly thirteen times less now than then. Presenting the subject in another form: were thirteen hundred patients, suffering from yellow fever, now to be collected together in one great hospital, the proportion to the actual population would not be greater than the one hundred and six sick in the Bush Hill Hospital were to the population of the city in 1793. In the record of the meeting of the committee (Minutes, pp. 61, 62), the Managers of the hospital exhibit a statement of the buildings at Bush Hill, and the purposes to which they are appropriated. The mansion-house contained one hundred and forty bedsteads. "The new frame house, built by the Committee as an addition to the hospital—the former mansion-house,—was 60 feet front and 18 feet deep, with three rooms on the ground-floor; one for the head nurses of that house, and the other two for the sick; each of the two last contains seventeen bedsteads, besides the loft, which may be used for the convalescents, and will contain forty bedsteads." The barn, with its three apartments, has been already described.

The Report farther states, as was before mentioned, that, "The sick are visited twice a day by two physicians, Dr. Deveze and Dr. Benjamin Duffield, who prescribe for them, and their prescriptions are executed by the three resident physicians

and the apothecary." One of the resident doctors was charged with the distribution of the victuals to the sick ; the first meal to be at eleven o'clock in the morning, and the second about six o'clock in the evening. The resident physicians and apothecary had two waiters under them, one of whom shaved the sick.

There is yet one record for us to introduce here, in which the name of Dr. Physick occurs in connection with his short term of service at the Bush Hill Hospital. It runs as follows, in the Minutes of the meeting of the Committee, Nov. 9th, 1793: "The Committee appointed to consider the physicians' accounts, report that they should be paid as follows, viz. :

Dr. Physick, for five visits, at 70s. p. visit, . . .	£17 10
Dr. Cathrall, " two " " " . . .	7 00
Dr. Leib, " three " " " . . .	10 10
Dr. Annan, " two " " " . . .	7 00

The amount paid to Dr. Physick was equal to forty-six dollars and thirty-three cents, or at the rate of \$9 33 $\frac{1}{3}$ cents a visit.* This would not be thought an indifferent fee at the present time; but it must be remembered that Bush Hill was then entirely out of town, or rather as shown by its barn, was decidedly in the country, and that, in the year 1793, when the great majority of persons, both of those in the profession as well as in the community at large, believed yellow fever to be a contagious disease, it demanded no small courage and the highest sense of duty to volunteer a constant daily and close personal contact and intercourse with the sick, such as must necessarily ensue between physician and patient, and in a still greater degree between a hospital physician and the patients who crowd its wards and deteriorate its air. The medical attendant must have felt that on the occasion of each visit, he was perilling his life. We speak of the prevalent impression at the time, without wishing it to be implied that there was really any such danger incurred. On the contrary, we have no hesitation in declaring that a physician visiting his patients twice daily at the Bush Hill Hospital, or even a resident there, was much less exposed to contract disease than if he had been

* The account is supposed to be in State currency, or 7s. 6d. to the dollar.

living in his own house in Water, Front, or Second Street, in what might then be called the infected district. In the hospital, at that time in a comparatively rural situation, he may be said to have enjoyed nearly entire exemption, so far as mere intercourse with the sick went, irrespective of fatigue, anxiety, and exposure to atmospherical extremes, particularly high heat and vicissitudes, and the interruption of his regular meals and hours of sleep. Among the first, if not the very first, of the physicians and writers in this city to deny the contagious nature of yellow fever, was Dr. Deveze. This he did formally in a small volume, which he wrote in English and French, in 1794, on the subject of the yellow fever of the preceding year. In respect to treatment, he was an advocate for the use of the lancet, and in its stead, when its use was not indicated, or sometimes in conjunction with it, enemata, gargles, baths, lemonade, chicken water, skimmed milk, emulsions, simples, and sedatives. If compelled to choose between this and Dr. Rush's celebrated purging, or emetico-cathartic and mercurial practice, we must confess that, with our present knowledge of the pathology of the disease, we would lean to Dr. Deveze's side.

The true hero of benevolence in this gloomy year, so memorable in the annals of Philadelphia, was another Frenchman, Stephen Girard. He it was who organized the hospital at Bush Hill, by substituting order, method, cleanliness, and efficient nursing of the sick for the reverse of all these qualities, which had prevailed before he and his associate, Peter Helm, took charge of the institution. The latter acted a very meritorious part in securing regular supplies of all that was needful for the inmates of the hospital. Here he and his associate were to be found daily, with scarcely an intermission, from the time (Sept. 15th) when they volunteered to superintend it, to that (Nov. 15th) in which their peculiar and arduous services in this way were no longer required, and when, as the minutes tell us, there were no admissions and no burials. During this interval of two months, invariably the first line of the minutes of the committee sitting daily at the State House, was: "Stephen

Girard and Peter Helm at the hospital." On the 16th of November, they once more took their seats with the other members of the committee, and continued to do so, up to the day (March 7th, 1794) when they held their last meeting. Mr. Helm, it may be related as a proof of his self-sacrificing conduct while a manager of the hospital, found great difficulty in overcoming his dread of contagion from approaching the sick. Towards the end of the epidemic, he visited the rooms of the hospital, and gave his personal superintendence of the patients. Stephen Girard, from first to last, never hesitated in obeying the dictates of the noblest philanthropy, never faltered in the line of duty which he had marked out for himself. He might, like nearly all if not quite all of the other rich merchants of the city, have fled to one of the adjoining towns, or taken refuge in the country, and contented himself, as they did, with contributing money for the relief of the sick, the poor, and the orphans, in this dire calamity. He did contribute a portion out of his own abundance, for these purposes; but he did more; he gave himself up to the service of all these parties. He went every morning to the hospital at Bush Hill, where his first care was not only to give directions, but to inspect the provisions and arrangements of the house; after which, he visited the apartments of the sick, bestowing his first attention on those who were in the greatest danger, and to them he held out the hand of friendship, and spoke in words of pity and encouragement. His dress might even be soiled by the ejections from their stomachs, without his seeming to heed it, or his being prevented from himself assisting the sufferer, by wiping his clothes, or persuading him to take another dose of the medicine which had just been rejected. Before quitting him to show the like attentions to another, he would feel the head and feet of the sick man, in order to judge of the degree of temperature of the skin, and then take from or add to his bed-covering, as might be called for on the occasion. The sight of the dreaded black vomit had no terrors for him; he was as prompt, in passing through the ward, to snatch up the basin and hold it for the sick man, as any practised and faithful nurse might be supposed to be in ordinary disease. Such are the representations of

an eye-witness, Dr. Deveze, who makes them in the work already noticed. It may be objected that the picture was drawn by a partial fellow-countryman; but Mathew Carey, another historian of the disease, is equally emphatic in his praise, as he is explicit in designating the services and devotion of the benevolent Frenchman. He uses the following language: "Stephen Girard, whose office was in the interior part of the hospital, has had to encourage and comfort the sick—to hand them necessities and medicines—to wipe the sweat off their brows—and to perform many disgusting offices of kindness for them, which nothing could render endurable but the exalted motives that impelled him to this heroic conduct."

A debt of gratitude is due from the city of Philadelphia to Stephen Girard, for the munificent and permanent endowment of the college named after him, as well as for the rich bequests of property which he made to the city: but the illuminated page in the history of this remarkable man is unquestionably that which records his self-sacrificing devotion for the relief of the sick and the suffering in the yellow fever hospital at Bush Hill, in the year 1793; and at a time too when the wisest and the bravest had fled in dire affright from the hourly recurring terrors of this desolating disease. The philanthropist will doubtless gaze in admiration at the magnificent colonnade of the Girard College, and speculate, perhaps, on the mixed motives which may have influenced its founder; but soon his mind will revert to the plain mansion and frame building at Bush Hill, in which the purely benevolent spirit of the man shone forth with an effulgence far beyond that which can ever be reflected from marble college or bronze statue.

In resuming the narrative of the services of the medical attendants on the hospital at Bush Hill, we shall quote the following passage from the Minutes of the Committee, at its meeting, November 21st, 1793: "The services of Dr. Benjamin Duffield were taken under consideration; and it was agreed that he be presented with five hundred dollars. The President is requested to communicate to him the thanks of the Committee for his attention to the afflicted at the hospital, and to deliver him a cheque for the above sum." Immediately follow-

ing this resolution is the announcement by the Managers of the hospital, that there had not been any deaths for two days past, and "as there is no prospect of many more deaths in that place, they will in future report occasionally."

The services rendered by Dr. Deveze, and the pecuniary grant made to him, are thus recorded in the Committee's Minutes for December 1st, 1798: "The services of Dr. Deveze being taken into consideration, after some time spent thereon it was resolved, that he hath, as far as hath come to the knowledge of the Committee, been eminently useful in the late afflicting calamity, and that this Committee ought to compensate him therefor, as far as lays in their power; that the President be requested to acknowledge the services which he hath rendered to the afflicted, present him the thanks of the Committee, and a cheque on the Bank of North America for fifteen hundred dollars, as a testimony of their approbation of his services and unremitted exertions for the relief of the afflicted, at Bush Hill, during the late sickness."

The resident medical attendants were three house-physicians; Messrs. Daniel Nicholas Morrice, Joseph Guisard, and — Mulnier or Muliner, and the apothecary, Aug. Joseph Leber, each of whom received four dollars a day for his services.

As the prominent part alleged to have been performed by Dr. Physick at the Bush Hill Hospital, during the prevalence of the yellow fever in 1798, is disproved, and is shown to rest on no historical foundation, it follows that all the conclusions drawn from this suppositious fact must be dismissed as necessarily inaccurate. Among these are the alleged notoriety which he obtained from his connection with the hospital, and the associations thence resulting, especially with Stephen Girard, which, as Dr. Randolph believed, "subsequently proved of immense benefit to him in promoting his professional success." Whatever may have been eventually the esteem of the rich merchant for the eminent surgeon, it is very unlikely that, at the time we speak of, Stephen Girard, the active manager of the yellow fever hospital, would feel particularly partial to Dr. Physick, one of the triumvirate who

refused to serve with Dr. Deveze, in whose capacity and professional ability Girard had evidently placed great confidence. We have reason to know that, for more than a quarter of a century after this memorable year, Mr. Girard did not look to Dr. Physick for professional advice, and if we mistake not, the assistance of the latter was invoked, for the first time, on the occurrence of the injury received by Mr. Girard, not long before his death. This eccentric man had a true Cato and Montaigne dislike to physicians; and leading the regular and temperate life which he did for many years, he was rarely under the necessity of having recourse to them in their professional capacity. At a time when it was the practice of the merchants of Philadelphia who traded with China and the East Indies, to have surgeons in their vessels, Stephen Girard always constituted himself an exception, and left the officers and the crews of his ships to draw, themselves, on the medicine chest, and to be their own doctors.

Dr. Physick must have been among the small number of the professors who, as we learn from Dr. Rush, continued at their posts during the trying months of September and October, 1798. Some were carried off by the pestilence, others carried themselves away to the country and neighboring towns, under the feeling of general alarm which infected nearly all whom the fever spared. There are on record two proofs of Dr. Physick's remaining in the city, and of his doing his share of duty among the forlorn hope, viz., his being himself attacked with the fever, and his making, in conjunction with Dr. Cathrall, dissections of some of those who had died of the disease. The result of these examinations confirmed the opinions antecedently expressed by Dr. Lining, of South Carolina, and by Dr. John Mitchell, of Virginia, that the force of the fever was spent on the stomach. Dr. Physick's constitution received a shock from the attack of the fever, from which, it was always his own belief, he never completely recovered.

It is evident that, in the following year, 1794, the subject of this memoir had reached a recognized position among the more prominent members of the profession. Dr. Rush, in his "Account of the Bilious Yellow Fever of 1794," makes frequent

reference to Dr. Physick; at one time as telling Dr. Rush of his having a patient with yellow fever under his care as early as the 6th of June; at another, of the inefficacy of bark; and, again, of the good effects of the antiphlogistic treatment, in this disease. At these times, his name is associated with those of Griffiths, Woodhouse, and Dewees. In this year, Dr. Physick was elected one of the surgeons to the Pennsylvania Hospital, and, also, a prescribing physician in the Philadelphia Dispensary. His long connection with the first of these institutions was to him a means of usefulness and distinction; to it, increase of reputation, as an asylum in which all that could be done by the art of surgery was accomplished. We shall have occasion to speak hereafter, in a more particular manner, of the value of his services in the hospital. During the short period in which he held the post of physician to the Dispensary, he discharged his duties to it with what may henceforth be called his characteristic punctuality and conscientiousness. We are told by Dr. Randolph that the professional engagements of Dr. Physick, as shown by his papers, increased very considerably during the year 1795; and that about this period, the prospect of establishing himself in business was exceedingly flattering. We learn, from the same authority, that in this year he began to keep a journal of the most remarkable and interesting cases which occurred in his practice, more especially such as were of a surgical character. This journal was continued up to the year 1810; but if we except the probable gleanings from it by Dr. Dorsey, introduced into the "Elements of Surgery" of the latter, the profession has derived no benefit from this precious record, which keeps company with his lectures in some old trunk or forgotten closet. Such things ought not to be.

The yellow fever of 1797 tried severely the physicians of Philadelphia. Dr. Physick suffered, in this year, from a second attack, during which he was bled to the amount of one hundred and seventy-six ounces. Dr. Rush states, in his history of the fever of 1797, that he attended two other persons at this time who had been affected by the epidemic of

1793, and two others who had suffered in a similar manner in 1794. Among the eleven hundred deaths from yellow fever in 1797, were those of nine physicians. Seven others in addition to Dr. Physick, viz., Drs. Reynolds, Caldwell, Church, Benjamin Duffield, Hayworth, Boys, and Strong survived an attack of the disease. It has been well said by a historian of the fever of this year, "If a generous contempt of danger and of death merits the gratitude of mankind, that tribute is undoubtedly due to the physicians of Philadelphia. The most laborious, hazardous, and disagreeable task was, in almost every instance, to be performed gratuitously." Among those physicians who fell victims to the disease was Dr. Annan, one, it will be remembered, of the early medical attendants at the Bush Hill Hospital in 1793, in connection with Physick, Leib, and Cathrall. Another, Dr. Pleasants, had retired to the country; but, feeling himself called on to confront danger, he returned to the city, and gave his life as an evidence of the sincerity of his benevolence. The case of Dr. Thompson was of a still more startling and melancholy nature. "He had been married in the evening; had gone to bed, and within two hours felt the symptoms of the disorder approaching. The family were alarmed. The bridegroom was removed, and died on the third or fourth day, leaving his unfortunate wife 'at once a widow and a bride.'"

The physicians to the Hospital at Bush Hill, which was opened for the reception of the sick, were Drs. Samuel Duffield and Edward Stevens: *Assistant Physicians*, Drs. Michael Leib, Bengier Dabel, William Annan, John Redman Coxe, John Church, Samuel Pleasants: *Resident Physician*, John Duffield. Of this list, Dr. Coxe still survives at the advanced age of 86 years, to give his reminiscences of the olden time without disparaging the present. At the close of the fever, the Board of Health appointed "a committee to purchase and transfer to Dr. Edward Stevens, to Dr. John Church, to the heirs of Dr. Bengier Dabel, to the heirs of Dr. Samuel Pleasants, to Dr. John Redman Coxe, to Dr. Michael Leib, and to the heirs of Dr. William Annan, each one share of the

stock of the Bank of Pennsylvania, and that the transfers so made express that they are in consideration of the high sense the Board of Health entertain of the services of those gentlemen during the calamity of 1797." Dr. Stevens, in a letter to the Board, politely declined the acceptance of the bank share granted to him. A similar acknowledgment of his services was made to Dr. John Duffield by the transfer to him of a bank share.* When we learn that there were only twenty-three or twenty-four physicians in the city, who attended patients during this season of pestilence, we can well imagine the excessive strain of mind and body to which they would be subjected, even if their ranks had remained entire, instead of being thinned by the death of eight of their number, and farther weakened for a season by the sickness of nine others.

There was yet another brotherhood, united together by a common feeling of benevolence, who volunteered their aid and exposed their health and lives for the relief of the sick and the suffering at this time. Some of them had been prominent in the discharge of the same arduous duties in 1793, and were now ready once more to take the post of danger. We love to record their names. They were Stephen Girard, Caleb Lownes, Israel Israel, John Letchworth, Thomas Savery, and John Connelly. To three of this number, Messrs. Girard, Lownes, and Connelly, was committed the superintendence of the City Hospital, as that at Bush Hill was henceforth called. We also read among the donors of money to the Board of Health and committees for the poor and destitute, the same names, in many instances, which were on a like record for the year 1793.†

* The par value of a share in the Pennsylvania Bank was \$500; so that it may be said \$4000 were given to the physicians, chief and assistants, at the Bush Hill Hospital in 1797.

† The descendants of these men, and of Philadelphians generally, will like to be reminded of the names of Jesse, and Robert, and Nicholas Waln, Archibald McCall, William Rawle, Robert Smith, Samuel Fox, Isaac Wharton, George Roberts, Pattison Hartshorne, Conyngham, Nesbit & Co., John Nixon, Joseph P. Norris, the Perotts, George Latimer, William Sheaff, Thomas Leiper, Joseph Cruikshank, Mordecai Lewis, Miers Fisher, and a number

The name of Dr. Physick will ever be associated with the history of the scourging epidemic yellow fever of 1798, and, this time, there can be no mistake in recording his gratuitous and invaluable services as Resident Physician in the City or Bush Hill Hospital. He had for associate on the occasion Dr. Samuel Cooper, who himself fell a victim to the disease. Some surprise will probably be felt at Dr. Physick's being able, conscientiously, to detach himself from the families and individuals in the city who must have regarded him as their medical counsellor. On this point we cannot offer any explanation, unless it be in the fact of the flight of so many families from the city. Certain it is that he was now looked upon as a man of mark, and was in high repute among his professional brethren,—evidenced both by his being made President of the Academy of Medicine and by the frequent reference to his observations on the yellow fever of this year, in Dr. Rush's brief history of the disease. The opinion unequivocally advanced by Dr. Deveze in 1794, that yellow fever is not contagious, was, with slight reservation, now advanced by the Academy of Medicine in a communication signed by the President, Dr. Philip Syng Physick, dated August 8th, to the Board of Health. We meet in this document with the following declaration: "Many respectable modern authorities assert that yellow fever is *not contagious* in the West Indies, and repeated observations satisfy us that it is rarely so during the *warm weather* in the United States. None of the cases we have yet seen have propagated it, and we conceive it to be an error as absurd in its nature as it has been fatal in its operation upon the city of Philadelphia, that the contagion of a disease should adhere to the timber of a ship during a sea voyage, and should spread from the timber of the ship without contact, through an extensive neighborhood, and cease to com-

of other familiar names, some of which were on the giving list of 1793 and others on that of 1797. Stephen Girard was not content with giving his time and exposing his person for the sick. He was also a liberal donor of money to the poor and the distressed. Robert Waln was placed at the head of the committee appointed in 1798, to procure subscriptions to a loan of \$30,000, to meet the orders of the Managers of the Marine and City Hospitals and the Guardians of the Poor.

municate itself afterwards by long and close connection of the sick with their families and attendants."

The City Hospital was opened on the 9th of August for the reception of the sick, and closed on the 1st of November. Few of the nurses of the hospital were attacked with the disease.* It was often customary for them to sleep on the same bed with the sick. One or two instances occurred of wives nursing their husbands, and mothers their children; and while thus engaged they would often lie on the same bed with them; but in no instance did these persons have the fever. The excessive mortality in the City Hospital, during the first five days after it was opened, alarmed Dr. Physick and his associate Dr. Cooper, to such a degree that they addressed a letter to Dr. Rush, who was consulting physician to the institution, for aid; and begged him to point out any mode of relieving the sick under their care, with which they were unacquainted. He, in his answer, recommended an emetico-cathartic compound which he extolled as being very efficacious, but the use of which has not been sanctioned by subsequent experience.

We find, in the History of the Yellow Fever in Philadelphia, in 1798, by Thomas Condie and Richard Folwell, the following list of physicians who remained in town during the prevalence of the epidemic: Drs. Rush, Griffiths, Moore, Wistar, Gallagher, Caldwell, Harris, Connover, Proudfit, Leib, Church, Boys, S. Duffield, B. Duffield, Parke, Stewart, Strong, Bigelow, Kinlaid, Pfeffer, Yeatman, Trexo; also four French doctors, viz.: Mayer, Pascalis, La Roche, Devivier. Drs. Physick and Cooper were at the Hospital. Dr. Rush, in his history, speaks of Dr. Sayer. The name of Dr. Currie, who took an active part both as practitioner and writer at the time, is also omitted in the above list. Dr. Dewees's name does not find a place in it, although, in the narrative of events, he is spoken of as having, in conjunction with Dr. Currie, offered

* It would be easy to find an explanation of the deaths of the few, in their exposure to the poison emanating from the ground in the infected district, during their previous stay, or subsequent visit in the city.

his services to attend gratuitously the encampment formed at Master's Place, near the mill pond, on the road to Germantown, and about two miles from the city. It was estimated that 2024 persons were lodged and fed at this encampment from the 15th and 20th of September to the 1st of November, at a cost of \$18,822 49. Besides the lodging sheds, there were erected a hospital, a large store-house and office, a bake-house and oven, and five kitchens, with eight fire-places. The encampment was laid out in regular streets which intersected each other. All the buildings were erected in the short period of eight or ten days. Previous to this, an encampment had been formed on the banks of the Schuylkill, between Spruce and Chestnut Streets; a locality which was then far out of town, and with a rural aspect which is not visible, and can barely be imagined, at the present day. The tents were made of canvass and floored with boards. "Here, nineteen hundred and fifty persons were fed, and some of them clothed." The women of the city were active and untiring in their discriminating industry and liberality in aid of the people thus encamped. But, it may be asked, when and where are not women ever generous and devoted to the cause of humanity when an appropriate appeal is made to them. Perhaps their sensibilities were more quickened on the present occasion by a public announcement of the fact, that there were in the encampment nearly seventy women who would become mothers before they could leave it.

The fever invaded the prison in the early part of September, which led to a thinning of its inmates by a removal of the debtors, and the vagrants and prisoners confined for petty offences; leaving about one hundred and sixty convicts, and nearly a hundred untried prisoners. On the appearance of the disease, the jailer, partaking of the general panic, abandoned his post and went into the country. His place was supplied for the following ten days by Robert Wharton, a vigilant and active magistrate, who was afterwards mayor of the city. Mr. Wharton, during this time, resided in the prison and performed all the duties of jailer until he was relieved of his charge by

Peter Helm, the worthy associate of Girard in superintending the Bush Hill Hospital in 1793; and who was also the superintendent of the Hospital at the Wigwam; and otherwise actively benevolent in 1797. After Mr. Helm took charge of the prison, he resided there day and night, alternately watching the convicts and attending the sick. Sanitary measures were carried out under the direction of another of the worthies of 1793, Caleb Lownes, the secretary of the Committee of Relief, it will be remembered, in that year. By these means the mortality among the prisoners was kept down to a comparatively small figure; the deaths in all being twenty-seven, and the number attacked by the disease forty-four. An attempt was made by the prisoners in the east wing, that on which the sick were, to escape; and but for the ready courage and colness of Mr. Wharton, who was in the jail at the time, it would have been successful.

It will, perhaps, be alleged that some of the scenes and incidents, and the names of individuals which we have introduced in relation to the epidemic visitation of the yellow fever in Philadelphia in the year 1793, and in the preceding years of 1792, 1794, and 1797, do not belong to the personal history of Dr. Physick. But without some historical references to the eventful times and the agitated and distressed community in which he performed so useful, and, in some sense, so conspicuous a part, we cannot do full justice to the man as a philanthropic citizen and a courageous physician. After learning, in this way, who were his local contemporaries, and what were the circumstances in a social and professional point of view in which he was placed, we shall be able, to some extent, to appreciate the trials to which he was exposed, the dangers he incurred, and the difficulties he overcame, while discharging the high trusts confided to him, as a member of a chosen band who had inwardly vowed to battle with dread pestilence, and to restore health and hope to their fever and fear-stricken friends and fellow-citizens. The simple announcement of the fact that Dr. Physick had volunteered his services as medical superintendent of the City Hospital, and that the offer had been ac-

cepted, would create a favorable opinion of his humanity and benevolence; but they would fail to convey any idea, approaching to the reality, of the scenes of suffering—the torments of the sick, and the agonies of the dying—of which he was hourly a deeply interested, but at the same time, of necessity a self-possessed witness—calm himself amid the groans, the cries, and contortions around him. More trying still, were the anxious inquiries of mothers, wives, and sisters after their sick relatives in the hospital, often at a time, too, when he must have felt that they were doomed to inevitable death. And then the grief, sometimes displaying itself in tears and sobs, sometimes in the low moans, and again in the piercing cries of the bereaved and hope-abandoned parents, who had lost their only son, or a sister her beloved brother, her only protector on earth! Such scenes as these called for more than a soldier's fortitude, while his part in them promised far less, in the way of subsequent honors and distinction, than a soldier's reward. Dr. Physick was placed in nearly a similar situation to that of the commander of an outpost of a beleaguered city, from which he was continually hearing of the sickness and the death of neighbors, friends and acquaintances, many of whom he must have esteemed for their virtues and venerated for their piety. He would be told, at the same time, of the protective measures taken by the authorities, and of the daily toils and exposure of the lives of the medical brotherhood, with all of whose names and merits he was familiarly acquainted. With what intense anxiety he must have inquired, from day to day, whether Rush, the more than "hero of a hundred fights," was still spared to lead on, as he had done in former years, the forlorn hope, and to teach the affrighted people, even in the very extremity of suffering, how to draw courage from despair. And there was his worthy compeer, the drab-coated Griffitts, who, ever at his post, showed now, as in former years of pestilence, how great civil courage and active services could be combined with Quaker mildness and simplicity of manner. Of Wistar, of whom afterwards he became the colleague in the University of Pennsylvania, Physick must also have received daily news relating to

his professional efforts in the common cause. All thoughts and feelings of jealous rivalry in the path of surgery, were, at this time, dormant in the minds of both. The ears of the resident physician at the City Hospital were becoming familiar with the names of Caldwell and Coxe, who had now appeared in the field of danger, and took part in the battle against pestilence and death. The former was to speak, nearly forty years afterwards, his funeral eulogium on the banks of the Ohio, in a city at that time barely known and in a State but then recently received into the Union. The latter was destined to be, in two several chairs, his collegiate associate in medical teaching. Dr. Church was another of the medical garrison in the more than besieged city. He was among our earliest lecturers on Midwifery, and cards may still be seen with the name of Dr. James associated with his own for a course of lectures on this branch.

While ample provision was made for the sick who could be taken to the City Hospital, those similarly afflicted among the poor in the city itself were not uncared for. The north part of the city, and the Northern Liberties, were placed under the medical charge of Dr. Francis Barnes Sayre, Dr. James Mease, and Dr. Kinlaid; Southwark, and the south part of the city, were attended by Dr. John Church, and Dr. Benjamin Duffield, while the centre was under the care of Dr. Samuel Duffield. It will be seen from this record and the references which we have previously made, that, great and conspicuous as were the merits of Dr. Physick, in taking his station at the City Hospital, he did not stand alone in devotion to the public welfare, under the trying circumstances of this memorable year. There was no need of any foil to set off the benevolent traits of these good men, although we are pained to say that it was created by the opposite course of other members of the profession. So at least we learn from a very significant passage in an able and a feeling address of the Board of Health, signed by its President, William Jones, to the citizens of Philadelphia, invoking their aid in the emergency. The words to which we refer are these: "View the list of your physicians, and mark how few are at their

posts."* In the absence of statistics which might indicate the entire number of practising physicians in Philadelphia in the year 1798, before the breaking out of the epidemic, we are unable to say how far the grave accusation, implied in the words just quoted, is deserved. On comparing, however, the number on duty in the city during this year with that of a similar class in 1797, we find the proportion to be more than three in the first to one in the last. The mortality in the medical ranks, does not seem to have been as great in 1798 as it was in 1797, although the actual and proportionate mortality among the citizens generally was much greater in the former than in the latter of these two years.

Dr. Physick, in addition to his direct services in the cause of humanity, by his applying all the resources of medical science for the relief of the sick in the hospital, contributed indirectly but efficiently to the same end by his pathological investigations. He continued, on this occasion, *post-mortem* examinations similar to those which he had made in 1793, and with the result of ascertaining, still more clearly than before, the gastric character of yellow fever, and the origin of the black vomit, which he and Dr. Cathrall showed to be given out from the inflamed vessels of the stomach and intestines. In the absence of any account, by himself or others, of his mode of practice in yellow fever, we are left to infer that, regarding, as he would do, the disease to be gastritis, he must necessarily have avoided the use of stimulants and of irritants—a conclusion the more probable, as we are told by Dr. Randolph, "that, in one instance, he ascribed the death of a patient laboring under this malady, to a relapse produced by swallowing a small quantity of chicken-water."

On the termination of his voluntary duties at the Bush Hill

* The members of the Board of Health who continued to transact business, were as follows: Wm. Jones, Wm. Penrose, Wm. Linnard, Wm. Dawson, James Oldden, Isaac Price, John Watson, John Inskip, Timothy Paxson, Joseph Eastburn, Wm. Allen, Health Officer, and Wm. Nesbitt, Clerk to the Health Officer.

or City Hospital, he received a very flattering and at the same time substantial testimonial of the estimation in which his services were held, in the shape of several pieces of plate, valued at more than a thousand dollars. The inscription on them was as follows :

"From the Board of Managers of the Marine and City Hospitals to

PHILIP SYNG PHYSICK, M.D.,

This Mark of their respectful approbation of his Voluntary and Inestimable Services as Resident Physician of the City Hospital, in the Calamity of 1798."

We have not learned why the Marine Hospital joined in this testimonial. It may be that the patients who, but for the organizing of the City Hospital, would have been of necessity received in the former, were sent to the latter, and in this way they came under the medical superintendence of Dr. Physick.

In the year 1800, Dr. Physick, then thirty-two years of age, married Miss Emlen, "a highly gifted and talented lady, and daughter of one of the most distinguished ministers of the Society of Friends." Of this union, four children were the fruit.

The year 1800 was a memorable one in the life of Dr. Physick in another respect ; for it was in that year that he began to lecture on Surgery to a number of students who were attending the medical department of the University of Pennsylvania, and also to some young physicians, in compliance with a request to this effect made by these parties. He was farther encouraged to take this important step by Dr. Rush, who, in giving his advice, was probably influenced by mixed motives. The latter may have felt the necessity of a more extended course of instruction in surgery than was compatible with the restricted plan in the University, in which this branch was taught in conjunction with Anatomy and Midwifery by Dr. Shippen ; and at the same time he may not have been loath to bring forward a rival to Dr. Wistar, who was then somewhat prominent as a surgeon, and who was, also, the adjunct of Dr. Shippen. Be-

tween Wistar and Rush a misunderstanding, some would choose to call it a quarrel, had existed since 1793, owing to some circumstances with the precise nature of which we are unacquainted. Whatever may have been the motive, the effect of the measure was in every way beneficial. Dr. Physick began to prepare himself for his new duties with his usual method and perseverance; and he was cheered at the outset by the approbation of those to whom his lectures were addressed. The introductory was committed to memory before it was delivered. At the close of the lecture, Dr. Rush, who was present by invitation, approached the lecturer, and, after shaking hands, observed with some emphasis: "Doctor, that will do; you need not be apprehensive as to the result of your lecturing. I am sure you will succeed." Words of prophecy; for seldom was man more successful in the accomplishment of all that he could have proposed to himself, or that could have been expected from him by others, than was Dr. Physick as a teacher of surgery. Not only did he attract attentive classes to his lectures for some years following this time, but he succeeded in opening the eyes of the trustees of the University to the necessity of erecting an independent chair from which surgery should be taught, and also, as an almost inevitable consequence, of appointing him to fill it.

This measure was taken in the year 1805. It was one not less of policy, in reference to the interests of the institution, than of gratification and gain to himself. He had now a wide field for the exercise of his powers, and was listened to by large classes in the University, through the members of which he could disseminate the principles of surgery, imbibed from his celebrated preceptor, John Hunter, and strengthened and enforced by his own meditation and personal experience, obtained in hospitals and private practice. During the period of thirteen years in which he filled the chair of surgery, that in which the school, be it said, had the largest classes and the highest reputation, it was the good fortune of Dr. Physick to diffuse what must ever be regarded as sound and clear views of the principles and practice of surgery, and to make his

opinions the received canons over a greater extent of territory than had ever previously received the lessons of any other teacher of this branch. In listening to him, the students felt that they were addressed by one who spoke with an authority, not merely derived from office, but from profound and thorough knowledge of his subject, and an entire conviction of the accuracy of what he was saying. With him there was no superfluity of phrase; no attempt to embellish the truth. What might seem to be wanting in copiousness, was made up in precision of diction. That which he knew, from carefully ascertained experience, had been his guiding star, ought, he believed, to fix in like manner the attention of his hearers. When, as has happened within our own observation, on a gloomy winter morning he held forth to his class with his lecture in one hand and a candle in the other, the attentive and almost venerating students might believe, for the moment, and especially when looking at his clearly defined, as if chiselled, features, and pale face, that he was a messenger from beyond the grave who had come to announce to them truths of deep import, which it behooved them to know well and to practise faithfully. His lectures were carefully prepared and written out. Of his meaning there could be no misconception on the part of his auditors, for the very sufficient reason, "that he never undertook to instruct others upon subjects which he did not clearly understand himself." What a wonderful curtailment of writing and lecturing, and of preaching too, would result if this rule were adopted by the crowd of us who are authorized, or claim, if not authorized, the privilege of teaching by the exercise of the tongue or of the pen.

Dr. Physick was opposed to extemporaneous lecturing, alleging that no man had a right to place so much confidence in his memory as would be implied by this practice, when treating of scientific subjects. There is some misconception in the meaning here attached to extemporaneous, which implies, properly, the utterance of sentiments and opinions without prior preparation, and of course without the speaker having previously marshalled them in his memory. Dr. Physick himself could

not be said to have delivered the introductory to his first course of private lectures extemporaneously, when he spoke it *memoriter*. In debating the question of the relative merits of an extemporaneous and a written discourse, we ought to bear in mind the different ideas attached to the former, according as it is understood to apply to the thoughts or to the language. Few men can trust themselves to extemporize their thoughts; many, if the subject-matter be duly weighed and arranged, may adventure with a probability of success on extemporaneous speech. Some in whom the *copia verborum* is allied to poverty of thought, are heard as extemporaneous speakers; but such persons cannot, without a long and tedious training, by which they learn to elaborate something from their small stock of thoughts, be listened to with the hope of receiving from them knowledge or instruction. In this case, the greater the fluency of speech, the smaller will be the flow of thought, as the very facility in the former indisposes from taking the time, and exercising the patience necessary to insure the latter. But without prior elaboration and suitable arrangement of his ideas, a man, having what is called a ready pen, incurs as much danger from being superficial in a written as he would in an extemporaneous discourse. The pen is no more trustworthy than the tongue, if it be allowed to give expression to the first vague notions and crude thoughts just as they occur to the mind at the moment. But as more time is taken up in the act of writing than of speaking, a better opportunity is offered in the former than in the latter case for a lecturer to arrange his subject in a methodical manner, so as, on the one hand, to avoid the pleonasms, redundancies, and repetitions to which he may be prone in oral discourses; and, on the other, of escaping the omission of some link in his chain of argument, or some pertinent fact in enforcement of a principle just enunciated. But entire success in either written or extemporaneous discourse must depend on a previously careful study of the subject, and meditation on all its bearings and great divisions, before an attempt is made to clothe it with language either written or spoken.

We remember to have heard, many years ago, an eminent and learned preacher* assign, in his pulpit, the reasons for his widely known intolerance of any interruption, as by a person coughing or a child crying, which might either distract his attention or that of the congregation, during the delivery of his sermon. "We," he never said I, "do not write our sermon, nor do we commit it to memory; but during a certain portion of the week we study the subject which we have selected for the purpose; we arrange it under its several heads with the arguments and illustrations which we may deem requisite, and thus, so far prepared, we enter the pulpit, trusting there to our being able to clothe the whole in appropriate language." One result of this method was to produce a conviction on the minds of the hearers, that every point of doctrine inculcated, every position advanced, and in fact the entire train of argument, had been thoroughly studied and matured, and they could not only wait without impatience, but listen with pleasure to the slow and measured utterance of extemporaneous language, which, under other circumstances, as the vehicle of crudities or flights of fancy, would be called too simple in its structure, if not positively meagre. Robert Hall, the celebrated Baptist preacher, and the most eloquent pulpit orator in England, in the early part of the present century, and who was peculiarly effective as an extemporaneous speaker, used to pursue a course nearly similar to that just described. He would, as we learn from his biographer, Dr. Gregory, first trace out the heads of a sermon—the grand divisions of thought. To these he referred, and upon them suspended all the subordinate trains of thought. "The latter again appear to have been of two classes, altogether distinct: outline trains of thought; and trains into which much of the detail was interwoven. In the outline train, the whole plan was carried out and completed as to the argument; in that of detail, the illustrations, images, and subordinate proofs were selected and classified; and in those instances, where the force of an argument or the proba-

* The Rev. Dr. Wilson, of the First Presbyterian Church in Philadelphia.

ble success of a general application would mainly depend upon the language, even that was selected and appropriated, sometimes to the precise collocation of the words. Of some sermons no portions whatever were brought out thus minutely; the language employed in preaching being that which spontaneously occurred at the time; of others, this minute attention was paid to the verbal structure of nearly half; of a few the entire train of preparation, almost from the beginning to the end, extended to the very sentences." The peculiarity in all these passages of thought and arrangement, consisted in this, that even when the preacher entered into minutiae in his more elaborate efforts, he still had no recourse to the pen.

It is very evident, therefore, from the preceding remarks, that to be a good, that is, an instructive extemporaneous lecturer, requires a thorough training of the intellectual faculties, careful and prolonged study, and patient elaboration of the subject under its several divisions, to a greater extent than is demanded in writing a lecture, during which the mind has time to draw on the stores that had been treasured up in the memory, and to frame the requisite argument and introduce appropriate illustrations. It must be equally clear from these premises, that he who shall pretend to teach extemporaneously because he has not time to write his lecture or discourse, commits a grievous mistake, since fully as much time, and certainly as we have just seen, more study is required in the first than in the second of these modes of delivering his thoughts.

The lecturer will probably do himself and his subject, as well as his auditors, most justice by first writing out fully his lecture, and then making a record of the prominent points as notes, which will both remind him of the divisions of his subject, and prevent him from the wandering and diffuseness to which a person who has not thoroughly studied it is so prone in extemporaneous discourse; at the same time, he will be enabled to look at his audience, and engage their attention with more certainty than if his eyes were continually on his manuscript. These notes ought, in fact, to resemble the "contents" of a chapter, telling briefly what has been excogitated and fully written

out; instead of being merely the dotting down of certain things as they may happen to occur to the mind at the moment, and which are meant to be merely suggestive of what is to be developed in the course of the lecture.

Doctor Physick's impressiveness, as a lecturer, arose, as already intimated, from his entire mastery of the subject, which he was careful never to magnify beyond its due proportions; and hence he always kept it within his grasp. The same thoughts and inculcations might have been uttered in a more masculine, certainly in a more ornamental style, compatibly still with good taste; but it is not certain that the essence itself would have produced a stronger sensation or been longer remembered by its being blended with these pleasant adjuvants. It is very doubtful, also, whether the delivery of the lectures on surgery by another person, and he even a man of mark, or their perusal in print, would have produced as instructive an effect as when they were given by Dr. Physick himself. Was it owing to a belief of this kind that the great professor never allowed his MS. lectures to be published, or left any discretionary power to a literary or professional executor to perform this office? The period that elapsed between the date of his resignation of the chair of surgery and his death allowed full time for a revision of his lectures, and of their being sent out as a welcome offering to the profession in the United States. It is true that the principles and modes of practice that were inculcated in them had become familiar to the numerous alumni of the University of Pennsylvania, who were to be found in all parts of the country, and of whom some had become teachers in their turn to an equally numerous body in the several States in which new medical schools were founded by them.

Dr. Physick had been appointed Surgeon Extraordinary, and also one of the physicians of the Almshouse Infirmary, in 1801, the duties of the former of which offices he discharged, in connection with those at the Pennsylvania Hospital, down to the year 1816. During this period of his life he underwent a vast amount of daily labor, to do which he was obliged to be economical of his time and methodical in the division of it.

His custom was, as he often told Dr. Randolph, to rise at four o'clock in the morning throughout the winter months; and as it was too early to expect the services of a domestic, he was obliged to make or arrange his own fire. "He would then sit down to his desk and prepare his lecture for the day; after which he would dress himself, and then take his breakfast, and leave his house between eight and nine o'clock, in order to attend to a most extensive and laborious practice. In addition to all this, he discharged his public duties as Surgeon to the Pennsylvania Hospital, and the Almshouse Infirmary.* He used often to remark, that in order to obtain entire success as a practitioner of medicine, it was necessary to work hard. He told me that in London this idea was conveyed by the emphatic expression of 'Doctor or Mr. is working himself into business.' It will be conceded that no portion of his success ever came to him gratuitously; on the contrary, he made laborious exertions to obtain it." He returned home about one o'clock, at which hour he dined. Between the hours of two and three P.M. he received patients in his office, and on this occasion, gave cheerfully gratuitous advice to those who consulted him. When his health allowed, he went out again after three o'clock, and continued to make visits till sunset. He seldom left his house in the evening or in the night, owing to his great liability to catarrh. When the business of the day was over, he was obliged to take a recumbent posture from mere exhaustion. His common hour of retiring to bed was nine o'clock.

A few words are due to a mention of the names of Dr. Physick's colleagues in the University of Pennsylvania. In the same year in which he was made Professor of Surgery, Dr. Rush was formally elected to the chair of the Theory and Prac-

* This latter building was in Spruce, between Tenth and Eleventh Streets, and with its offices and out-houses extended back to Pine Street. On its site have been erected private houses. The present Almshouse with its spacious Infirmary, known as Blockley or the Philadelphia Hospital, and the Asylum for the Insane poor—the Pauper Palace, as it is not unaptly called—lies on the other or west side of the Schuylkill.

tice of Medicine and of Clinical Medicine, although he had been discharging the duties pertaining to it for some years previously. In 1808 the death of Dr. Shippen left Dr. Wistar in full possession of the chair of Anatomy and Midwifery; but in two years from this time he detached himself from the latter of these branches, which was created into a separate chair, whose first incumbent was Dr. Thomas C. James. Dr. Benjamin Smith Barton continued to teach *Materia Medica* and Botany, having held the chair from the time of the union of the University of Pennsylvania with the College of Philadelphia in 1791. He had received a similar appointment in the Medical College of Philadelphia in 1789, on his return from Europe. On the death of Dr. Rush in 1813, Dr. Barton was elected to the chair of the Theory and Practice of Medicine, and was succeeded, on the occasion, by Dr. Chapman, who had, a few years previously, been associated with Dr. James in giving a course of private lectures on Midwifery, and who now became Professor of *Materia Medica*. In the first period of Dr. Physick's professorship, Dr. Woodhouse occupied the chair of Chemistry, which, on his death, in 1809, was filled by the appointment of Dr. John Redman Coxe. Dr. John Syng Dorsey, nephew of Dr. Physick, was made adjunct professor of Surgery to his uncle in 1807. In the year 1816 he received the appointment of Professor of *Materia Medica* as successor to Dr. Chapman, who, as stated above, had been transferred to the chair of the Theory and Practice after the demise of Dr. Barton. This event took place towards the close of the year 1815, shortly after the professor's return from Europe, where he had spent the previous summer. Farther changes followed in quick succession. The death of Dr. Wistar in 1818, left a vacancy which was filled by the election of Dr. Dorsey to the chair of Anatomy, who was succeeded by Dr. Coxe in that of *Materia Medica*, while Dr. Hare was installed in that of Chemistry. Dr. Dorsey died before the completion of his first course.

What a glorious privilege was that enjoyed for nearly a decennial period by the students who attended the medical lectures in the University of Pennsylvania; to pass from the

amphitheatre of the great teacher of Anatomy, Dr. Wistar, to that of Physick "the Father of American Surgery," and thence to go and hear the prelections of Rush, the American Hippocrates, and the father of American medicine, the medical philosopher, the philosophical philanthropist, patient, learned yet ever learning, diligent in collecting facts, and ready when the opportune moment came to expand facts into principles; whose purity of life, from boyhood to advanced age, was the practical commentary on his elevated ethics, and whose pen and tongue were enlisted in the advocacy of every theme that could give value to the independence of his country, by improving the health, cultivating the minds, and preserving the morals of its people.

During the quarter of a century that followed the election of Dr. Physick to the chair of Surgery, he was the recognized chief of the surgeons in Philadelphia, and there were but few, if any, to contest the leadership with him in any other city in the Union. This may be said without disparagement of the merits of men of deserved eminence both here and elsewhere. Among the first we cannot overlook the names of Hewson, Parrish, and Hartshorne, his more immediate contemporaries during this period in Philadelphia; nor of Post and Mott in New York, Warren in Boston, and Dudley in Lexington, not to speak of Gibson in Baltimore. Nor was his reputation confined to surgery; he ranked very high as a physician also, and his advice was continually invoked by his professional brethren in consultation, both at home and at a distance, and by large numbers of invalids from all parts of the United States, who came to Philadelphia expressly to place themselves under his care. If the keepers of hotels and boarding houses, and the manufacturers and venders of light and ornamental articles for furniture and personal adornment had placed to Dr. Physick's credit a moderate percentage of the sums which they received from strangers who came to consult him, and from the members of their families and other friends, it would, we think, have very probably amounted to an income equal to all his personal and domestic expenses. As surgeon to the Hospital and Almshouse In-

firmly, his name became familiar to, and prized by the common people. As teacher of Surgery in the University of Pennsylvania, his precepts and practice were carried by his venerated students to every part of the country; and their animated representations could scarcely fail to induce many who were their friends, neighbors or patients, to come and receive healing balm from the chief dispenser himself. At home, in his native city, in the circles among which were to be found the most affluent and the most intelligent, his successes, his punctuality, and his readiness of resource to meet any emergency, had become familiar as household words, and insured him continual applications for the relief of their various ailments, wounds or deformities, and, at the same time, large remunerative fees in return for his services.

Like J H
Wheaton
teacher

What more did this eminent man want to make him happy? He had acquired fame, honors, wealth; and he enjoyed the proud consciousness that, by the teachings and practice of his profession he was a benefactor, not only to his native city but to the nation at large. But, alas! these are not the sole, nor even the chief conditions for happiness, where health and the flow of spirits which health alone can give are absent: they cannot compensate for the want of the intimacy of friends, or of the chosen companions who heartily and appreciatively enter into our feelings, participate in our triumphs, and bring home distinctly and pleasurably to our daily perceptions an intimate knowledge of the admiration and regard which the world feels for us. All is vague, indeterminate, and unsatisfactory, until the opinion comes with more than the force of an oracle from the mouth of a friend, as expressive of that friend's own convictions. Dr. Physick, throughout the greater part of his career, as far as regards social intercourse, its amenities and minor pleasures, and the charms of friendship, seems to have lived lonely and alone. In the declining years of his life, he must often have said to himself—if not in the very words, yet with the feelings of poor Kirke White—"I have lived an unloved and solitary thing." His health—never very good, and especially after his successive attacks of yellow fever in 1793 and 1797, to which he had

been subjected—was shaken severely and durably from typhus fever in 1813, the same year in which Dr. Rush was carried off. He was also liable to frequent returns of catarrh, and to a still more painful, the poor sufferer himself would call it, excruciating malady, consisting in the formation of small calculi in the kidneys, and their slow passage through the ureters into the bladder. "I knew him intimately," writes Dr. Horner, "since the death of his nephew, Dr. Dorsey, in 1818, and may say that he never passed a day without some sensation of pain, feebleness, and derangement in his system—sometimes a catarrh—at other times a headache—sometimes pains in his kidneys, with sabulous discharge—sometimes dyspepsia—at other times anasarcaous swelling of the legs, and always a small, feeble, wiry pulse, irregular, and indicative of ossification, or some other change about the left valves of the heart.* To these were added frequent exacerbations of his habitual disorders—catarrh and nephritis—amounting to threatening illness, and from which he recovered very slowly."

Bodily infirmities and disorders thus frequently recurring must have indisposed, even if they did not actually preclude, Dr. Physick from intercourse with the world beyond the rigid requirements of professional duty, which were of themselves heavy and exacting. He does not seem to have availed himself of those other sources of consolation in books, through which we can hold "communion large and high with bards and sages old," and terminate or prolong, without offence, an intercourse with various minds, according as time allows or inclination prompts. He did not seek for sweet oblivion of the dull, hard, and often repulsive realities of every-day life by losing himself, for an hour in the evening, in the mazes of speculative philosophy, for which he had no fondness, and, as we should infer, no respect. He cared not, fancy free, to follow the poet in his

* We copy the notice of the symptoms furnished by the pulse, but without vouching for the accuracy of the diagnosis of organic disease of the heart, to establish which requires a more detailed symptomatology than is here given. The final and conclusive test of a *post-mortem* examination was expressly prohibited by Dr. Physick before his decease.

songs of love and friendship, his descriptions of sylvan scenery, or, in more lofty strains, the trials and adventures of the hero of the epic muse. We speak not now of the still higher, purer sources of consolation, when faith, on the wings of imagination, points the way to the great future, opening out pictures of wonderful beauty and variety, in the contemplation of which the wearied soul finds consolation and refreshment. The subject of this memoir had no imagination, nor any delicate perception and love of the beauties of either nature or art: he cared not for philosophy nor for poetry, and he was not prone himself, nor very patiently allowed others to indulge in any prolonged reasoning on medical subjects. But of this we shall have something to say when summing up his professional achievements and character.

Dr. Physick had not the inclination, or he wanted the art to bring forward young men in the profession, and to give them encouragement in their early trials similar to that which he received at the hands of Dr. Rush. In this respect, there was a marked contrast between him and one of his colleagues in the University, Dr. Chapman, who rallied around him a body of young men, to whom—especially in the Philadelphia Medical Institute of which he was the founder—he furnished opportunities and incitements for exertion, by which they all acquired position, and became, in their turn, instruments for the diffusion of much professional knowledge and promoters of sound medical ethics, as lecturers, authors, and journalists. The only attachment of this kind felt by Dr. Physick, which would seem really to have been characterized by warmth, was that for his nephew, Dr. John Syng Dorsey, whose talents and attainments and rapid rise justified his partiality, and whose comparatively early death must have left him bereaved of that companionship which alone could awaken his dormant sensibilities, and make him at all desirous of keeping up social relations with the world around him. His son-in-law, Dr. Randolph, a kind, good-hearted gentleman, and who, under his auspices, attained eminence in surgery, came too late, even if he had possessed the requisite qualities for acquiring in-

*This contrast
p. 405 - where
it is said
he had
generally
students*

fluence, and imparting a healthier tone to his feelings. We must be understood, in these remarks, as speaking of Dr. Physick out of his domestic circle. Within it, as far as we can learn, he was a kind and even an indulgent parent.

In his intercourse with his professional brethren, Dr. Physick was punctiliously observant of all the recognized rules of medical ethics, when he met them in consultation, as well as when their practice and opinions, as revealed to him at the bedside, were made the subject of remark or criticism by the sick and their friends in his presence. Being himself a model of precision, punctuality, and caution, he laid proper stress on these qualities being manifested by others in their intercourse with him; and if he was betrayed into impatience, it was at a neglect on this score, which might not only compromise the reputation of the professional adviser, but, a still more important consideration, prove detrimental to the patient. The very frequent calls on him to visit the sick made it indispensably necessary that he should economise his time, both in justice to them and to himself. Being habitually, we might say constitutionally, a man of few words, and having neither time nor inclination to touch on extraneous themes, or to set himself about conciliating either the patient or his friends by any arts of manner or speech, he proceeded at once to ascertain the previous history and the actual symptoms of the disease, with a view of forming a correct diagnosis and of deducing from it the appropriate treatment. Intent on discharging the first part of his duty by questions made with the least possible waste of words, he was equally desirous of acquitting himself of the obligations of a prescriber in a similarly laconic style; and hence he was not disposed to receive hints or suggestions from either the patient or his nurse and friends, as to the course to be pursued; and still less could he brook opposition to the advice which he finally laid down on the occasion. After careful inquiry into the nature of the disease of his patient, and its morbid antecedents, a physician is bound by the highest sense of duty, paramount to all considerations of his own dignity, to decision in laying down the rules of treat-

ment, and firmness in enforcing obedience to these dicta. Idiosyncrasy, constitutional peculiarities and predisposition, previous disease and habitual infirmities have, it is to be supposed, all been inquired into, and their relative influence in modifying the character, intensity, and progress of the existing disease, studied by the physician before he prescribes the therapeutical and dietetic course to the patient. In this way he leaves no show of reason or logic for ignorance, impertinence, or misguided affection to obtrude its fears and its cautions, and sometimes its prognostics of a sinister termination of the case. If he desires to be useful and efficient, he must preserve his authority, and be regarded, for the nonce, as the oracle whose dicta are beyond appeal; for who, in the sick-room, shall compete with him. Who has brought to the judgment the faculties strengthened by exercise and experience, and a knowledge of the resources called for by the emergency, which he possesses? If he concede one point, he will be asked to yield another, and soon he will be supposed to have no fixed opinion at all, and, by and by, the patient and old crones and gossips of either sex will erect themselves into a college, and enter on a course of empirical guesses and trials, which, as the case has been reduced already to an affair of guessing and trying, may, they think, be as good as the uncertain opinions of the easy and flexible doctor.

But while he maintained his professional and personal dignity, Dr. Physick was rarely abrupt, never rude in manner or in speech, and could retain his self-possession under circumstances of considerable aggravation. We cannot regard as deviations from this course, his sometimes reminding patients that he had rights as well as they, and that among these was the privilege of withdrawing from attendance when he found that his directions were not obeyed, or so imperfectly followed as to make them of little avail. He would not accept responsibility when deprived of control, nor allow it to be said that he was the physician in a case in which others were the advisers, or nullified his carefully devised and connected plans of treatment. He never furnished an excuse, by vacillation or yielding to the

caprices of his patient, for the corrupt and senseless course of the venal crew, who, in conflicting systems of medicine, if, indeed, an absence of all the rules of logic and common sense can entitle every absurd fancy to be called a system, allow the sick man to choose the one by which he shall be treated. There would be scarcely a broader contrast, and one marked by more cruelty and absurdity, were a commander of a steamer to tell his passengers that he leaves it to them to determine by vote, whether, when the machinery has become deranged, the engines shall be repaired and continue to work in the old way, so as to send the vessel forward at the rate of ten or twelve miles an hour; or, in accordance with a new creed in mechanics, they shall raise motive power by blowing the bagpipes, the bassoon and the French horn, and by making sundry gyrations with their arms, and pirouettes in the style of the ballet, so as to simulate the rotation of the paddle-wheels.

Calm as he was in appearance and manner, and sententious in speech, even to such a degree as to cause him to be looked upon as cold and repelling, Dr. Physick could unbend himself to sympathy for patient suffering, and manifest considerate kindness for those who resigned themselves in all confidence to his professional guidance. There are many still living, who love to expatiate on these exhibitions of his gentler mood, when he was a frequent visitor at their sick couch. The pleasure in these cases was, perhaps, heightened by contrast and a little personal vanity, at the reflection that they were the more favored few. The feelings of this class of his patients, were prettily expressed, in some lines addressed to him, in the "Philadelphia American Daily Advertiser," by, it is believed, a member of Congress from a distant State. We give the last two verses:

"They say thou'rt cold—unlike to other men;
A snow-crowned peak of science, towering high
Above the heart's warm, soft, sequestered glen,
As flashing sunset glories on the sky.

"Who say so, know thee not; nor can discern
 Beneath thy sage, professional disguise,
 How deep the feelings he whom they call stern,
 Hides from dull heads, hard hearts, or careless eyes."

Hitherto, all the offices and honors conferred on Dr. Physick, were fairly won, and incontestably appropriate, and in unison with his favorite tastes and pursuits, of which the chair of Surgery, in the University of Pennsylvania, might be regarded as the illuminating centre. Here he was the ministering high priest, standing alone and above all, before the altar in the temple of Epidaurus. By what sinister influence, then, was he persuaded to abandon this post, and to become one of the sacrificial priests—a sacred butcher, without even a soothsayer's privilege of declaring the auspices? When speaking, a little way back, of his associates in the medical department of the University, and of the changes in the occupancy of the chairs during the period in which he was Professor of Surgery, we did not extend the narrative further than the death of Dr. Dorsey, in 1818. Dr. Physick was appointed to succeed his nephew, the following year, 1819. Pliable, and yielding up his own better judgment to the schemes of others, for perhaps the first time in his life, when, more than at any former period, he ought to have been firm, he "allowed himself to be transferred—for the act was not of his own choice—from the chair of Surgery, to that of Anatomy, from the place where he was emphatically at home, to one in which he was comparatively a stranger." In this step, his pre-eminence did not accompany him. Though unequalled as a surgeon, he had more than equals as an anatomist. He had many superiors. He ought not, therefore, to have consented to this transaction. It did not belong to his character and standing, to submit to inferiority and invite defeat, by engaging in an enterprise, in which others could surpass him. The act was a descent from his 'high estate,' which dimmed and deadened his academic lustre."* The connection of Dr. Physick with the University, for the next twelve

* Caldwell—Commemorative Discourse, &c.

years, was one of commonplace routine, which his friends and the friends of the institution, hardly cared to notice at the time, and would willingly have forgotten since. A sad commentary this on jobbing in collegiate chairs, which one sees, every now and then, carried on in medical schools, with as little regard for the interests of science and learning as if it were a question of arranging the seats of the guests at a dinner-table. His resignation of the chair of Anatomy, in 1831, owing to increasing infirmities, if it excited any sensation at all, gave satisfaction to the medical community; as, by this act, he freed himself from trammels that he ought never to have allowed to be imposed on him. The University suffered from Dr. Physick's abandonment of the chair of Surgery; but it lost nothing by his leaving that of Anatomy. In the first, he had been succeeded by Dr. Gibson; in the second, by Dr. Horner; the latter of whom, after having been for many years his adjunct, was appointed his successor. The trustees, on accepting his resignation, unanimously elected him "*Emeritus* Professor of Surgery and Anatomy." This honor was purely titular. He never gave a lecture after it was conferred on him.

Mention may be made here of some other offices of honor and membership of societies, in which he was elected. In 1802, he was made a member of the "Philosophical Society;" but, like many others who were affiliated with it, he never contributed anything to its Transactions, and rarely, if ever, attended its meetings. He did not imitate his former fellow-student, Sir Everard Home, whose communications to the "Royal Society of London," were very numerous. We must add, however, at the same time, that Home's originality in many of the questions of Anatomy and Physiology, on which he wrote, and his honesty in procuring the means by which he obtained the materials for his papers, have been more than questioned. He borrowed largely from their contents, and even abstracted no inconsiderable portions of the manuscript papers of his distinguished brother-in-law, John Hunter, which, with the museum of the latter, had been deposited in the Hall of the College of Surgeons. He left in the minds of all, a strong sus-

picion, amounting almost to conviction, that much of what he had sent to the Royal Society, as his own, was derived from his former teacher and relative; and it was ascertained that in order to conceal his literary piracy, he burnt the abstracted documents which would have furnished evidence to convict him.*

In 1821, Dr. Physick was elected consulting surgeon to the Institution for the Blind; and, in 1822, president of the Phrenological Society of Philadelphia, just then founded. This last appointment furnished an amusing instance among the many that are continually met with, of the readiness of people to pin their faith to a name; they being entirely ignorant of the thing itself. Many persons who thought themselves privileged to ridicule and condemn the doctrines of phrenology, without their having given them any thought in the way of observation and study, assumed a new and altered tone, when told that Dr. Physick was elected president of the Phrenological Society. It must be confessed that the founders of the latter had this result in view, when they invited him to take the office. It was enough for him that the new inquiries of Gall and Spurzheim had already thrown additional light on the anatomy and physiology of the brain, without his caring to inquire into the accuracy of the details of their physiognomical system. In 1824, he was elected president of the Philadelphia Medical Society, and he retained this office until his death. One cannot look back in this Society, and remember the animated discussions which were held in it by Chapman, Dorsey, Caldwell, Parrish, and Rousseau, and by Colhoun, Jackson, Meigs, Godman, J. K. Mitchell, Thomas Harris, La Roche, Bell, George McClellan, and the brothers Coates, &c., without a feeling of regret at its long suspended animation. Its partial resuscitation, in 1845, deserves special notice; as, to the presence and action of its delegates, who were appointed that year to attend the Medical Convention, held in the city of New York, a full share of the salutary course of the debates and resolutions of that body, and of its adjournment to

* See Otley's Life of John Hunter, p. 152.

Philadelphia, and the organization of the National Medical Association, is undoubtedly due. The medical faculties of the University of Pennsylvania, and of the Jefferson Medical College, held back from giving any countenance to the Convention; and the College of Physicians, of Philadelphia, by a decided vote placed itself in the same line of opposition.*

The election of Dr. Physick to the presidency of the Pennsylvania State Temperance Society, in 1834, was made with a knowledge of his own temperate habits, and of his inculcation of similar ones on those over whom, either as physician or friend, his advice would carry weight. The Society was not insensible to the influence of his name, even though he had never formally enrolled himself among its members. His tenure of office, however, was short. He had no objection to give his name and the social influence which it would carry with it to so good a cause; but he did object to give his money also, especially in the large figures then common with some of the more ardent and generous of the Board of Managers of the Society.

In 1825 he was elected a member of the French Royal Academy of Medicine; he being, we are told, the first American who received this honor. The last distinction of the kind conferred on him was in his being made an honorary Fellow of the Royal Medical and Chirurgical Society of London.

The last winter of his life was marked by a spontaneous exhibition of the admiration and esteem in which Dr. Physick was held by the medical students of the University of Pennsylvania, although they might be said to belong almost to a new generation, since his withdrawal from the duties of his chair. At a meeting of the Class, held December 3d, 1831, a committee was appointed to procure Dr. Physick's consent to sit for his portrait to the eminent artist, Mr. Inman. This request was complied with, and on the morning of February 22d the portrait was presented to the Medical Faculty, in the pre-

* Since writing this memoir, the Philadelphia Medical Society has been reorganized under a new Constitution and By-Laws.

sence of many of the Trustees, several strangers, and the Medical Class. A brief and pertinent address, in the name of the latter, was made by Mr. N. Berkeley, which was responded to by Dr. Horner, the Dean, on the part of the Medical Faculty. He was followed in some remarks appropriate to the occasion by Dr. Hare, whose sentiments, in looking at the portrait, "were the mingled offspring of admiration for talent, esteem for virtue, and gratitude for the most zealous, effectual, and disinterested services." The speaker declared that Dr. Physick, in the sphere of his practice, "had fairly enthroned himself upon the gratitude and esteem as well as the admiration of his patients."

Increasing infirmities and weakness had for some years past caused longer and more frequent interruptions to his regular attendance on the sick, until at last his fellow-citizens had reached the painful conviction that they must forego entirely his services, and speak of him and pass his mansion as if they were never more to see him approach their bedsides while bringing to them hope and health. It had been, indeed, a matter of surprise that, with his feeble frame, he still continued in the practice of the profession, when he could not be supposed any longer to be influenced by the common incentives,—love of fame and love of lucre, even were we to admit that he had been previously swayed by considerations of this nature. He was now one of the wealthiest men in Philadelphia. Some explanation may be found in the force of habit—persistence in doing what we have been long accustomed to do, irrespective of pleasure or of profit—and the painful void left by cessation of the daily routine, in whatever it may have consisted. It is only in this way that we can find a solution of the seeming anomaly exhibited in all men actively engaged in any profession or calling: the physician and the lawyer—the merchant and mechanic—the weather-beaten mariner, and even the daily laborer, looking forward to a time when they shall take their ease and live on the accumulated earnings of former years; but yet when that time comes, and when the fortune is made or adequate income secured, a majority still continue in their

several pursuits, as if on a nearer approach they feared, and not always without reason, that something sinister were concealed in the leisure and the absence of the corroding cares of business and labor, which, at a distance, they so much longed to enjoy. Of the actually retired few, we meet with two classes. Those of the one are at a loss how to employ their time, and are consequently unhappy. The members of the other, and unfortunately the smaller class, having mental cultivation and diversified tastes, find solace and occupations in reading, study, dilettanti agriculture and gardening, with the farther enjoyment of active participation in schemes of benevolence, and the conversation and company of friends, who are ready to reciprocate the cheerfulness and amenities which they are themselves receiving from these men of leisure.

Dr. Physick did not belong to this last or favored class. Retirement from professional life was to him almost entire isolation. He had never cared for society, and in return society took no pains to please him; and even if, at last, he had been so minded, he would not have known how to make it subservient to his enjoyments, or, on his part, to have contributed a share towards its requirements. Withdrawing himself from the exercise of his profession, he would of necessity have been thrown upon his own mental resources, and these were limited almost entirely to one field of the vast domains of literature and science. If he failed to find relaxation or pleasure from other sources during the period of his active business life, he could hardly be expected to reach them at a time of sickness, and in the weakness and infirmity of old age. As we have already intimated, he had no fondness for contemplative philosophy, nor for the study of philosophy in action as represented in history; nor did it ever occur to him to betake himself to the regions of imagination, or go a step beyond the realities of life and the logic which dealt with matter alone. We have never heard of his partiality for any poet, nor of his yielding to what he would probably have regarded as a weakness in repeating a line of poetry. To the fine arts he was equally indifferent, and hence he never cared to go beyond the dry details of special anatomy,

by enlarging on the anatomy of expression and its relations to painting, sculpture, and poetry. In this limited intellectual range he resembled his famed contemporary, Dupuytren, to whom, on the score of moral attributes, he was so superior. His studies and observations were not of that comprehensive nature which included both material descriptions and details, and general literature and subjects of taste—as evinced by the two Petits, Antoine Louis, and, in our own times, Percy and Roux, among the French; and by Cheselden, the brothers John and Charles Bell, Carlisle and Lawrence, among the British surgeons and anatomists. With the latter we may rank William Hunter and Baillie, who taught anatomy, and shone, the one in obstetrical, the other in general practice. Cheselden was not the less eminent and successful, both as anatomist and surgeon, for being the friend of Pope and an associate of the “great master spirits of the age”—men of genius and of taste. Scarpa, one of Italy’s favored sons, was a good draughtsman, and an ardent lover of painting and the fine arts in general.

Dr. Physick was possessed of a large fortune, and might have made his spacious mansion one of social meeting for his fellow members of the profession. He would thus have relieved himself of painful introversion of thought, and imparted to them pleasure, not less than instruction, even though he may not have chosen to appear as the central figure of the group, but have left to others the task of colloquial entertainment. His own sententious remarks would always have procured him deferential attention.

It was left for his colleague, Dr. Wistar, to begin, for the first time in this city, if not in this country, this kind of literary and professional reunion, which in Europe had been long known and prized under the title of *conversazione*, an indication at once of the Italian origin of the practice. To the celebrated Dr. Mead, in the early part of the last century, must be awarded the credit of substituting such meetings among physicians, literati, and wits, for others that were quite common before. These consisted in a certain number of medical men adjourning to a coffee-house, and talking over their cases

and their cures; while discussing, at the same time, the qualities of the wines which they used freely to imbibe. His house in Great Ormond Street, to which he added a gallery, was the resort of men of learning and taste, from all parts of the world; and so well was this understood that it would have been a reflection on a traveller of either of these classes, not to have become known to and visited Dr. Mead. It was acknowledged by all who knew him that few princes have shown themselves equally generous and liberal in promoting science, and encouraging learned men. He threw open his gallery in the morning, for the benefit of students in painting and sculpture, and was even in the habit of lending the best of his pictures for artists to copy. No discovery was made in science, in which he did not take a lively interest; no great literary work was brought out to which his name, as patron or friend of the author, did not appear. He kept in his pay a number of artists and scholars, both for their benefit and his own gratification. His hospitality was unbounded, and consequently his housekeeping expenses were very great; for, not content with the reception of his own friends and acquaintances, he kept also a very handsome second table, to which persons of inferior quality were invited.* And whence, it may be asked, did he procure the means for this large and liberal expenditure? Was he the possessor of a great patrimonial estate? Had he become rich by lucky stock speculations, to which, by the way, he was rather prone; or was he a court favorite, in the enjoyment of a large sinecure? From none of these sources did Richard Mead, M.D., derive his income. It was the reward of a long period of arduous professional labor; not hoarded up to gloat over in his old age, or to insure him the reputation of dying a very rich man; but it was liberally and tastefully spent in deeds of munificence and charity.

Mead was at the head of his profession in London for nearly half a century, and was engaged, during most of this time, in a lucrative practice, the proceeds of which amounted, in one year, to a sum equivalent to thirty-five thousand dollars; and

* The Gold-Headed Cane.

for several years to twenty-five and even to thirty thousand dollars. He was, also, the author of various works; and yet, amidst all his engagements, he could find the time, and, more surprising still, retain the disposition, to receive his friends and others at his house in the manner just described. His crowded *conversazioni* were held at stated intervals, in his library, a spacious room, about sixty feet long, which contained a collection of ten thousand volumes, an immense number of prints, drawings, coins, and medals, of the greatest variety and value. Under the same roof were contained, in addition, statues, busts of Greek philosophers and Roman emperors, Etruscan vases, &c., and the gallery of paintings. That these last belonged to a high style of art, was evinced in the fact of their being sold, after his death, for seventeen thousand dollars; being more, by two or three thousand dollars, than he gave for them. It must be confessed, and, to suit the notions of a certain class of monied men, in a deprecatory tone, too, that Mead did not leave behind him as large a fortune as he could easily have done, if his sole ambition had been to bequeath to each of his three children, a quarter of a million of dollars, in place of not quite this amount divided among them.

Every century does not bring forth a Mead; and if the name and example of this illustrious man are introduced in the present instance, it is with no design of inviting comparison between him and our great American surgeon, and impliedly dimming the lustre of the latter; but rather to show that the suggestions as to what he might have done, were made in no exacting spirit, nor after an imaginary standard, but only with the view of vindicating the claims of our profession to a union of painstaking and laborious duties and studies, with an exercise and display of various learning and cultivated tastes.

The only recreation which Dr. Physick allowed himself was in the latter period of his life, when he used to spend a portion of every summer on an estate in Cecil County, Maryland, which he had purchased from his brother. He had become greatly attached to this spot, on the occasion of his visiting it for the purpose of recruiting his health, which had been sensi-

bly weakened by a second attack of yellow fever, in 1797. We wish that it were in our power to give the details of a day's life during his temporary residence in the country, as it would have afforded some measure of his means of warding off ennui, and of the intellectual resources of the man himself. He was, on these occasions, generally accompanied by one or more of his children.

Surgery was, in a great measure, abandoned by Dr. Physick, at least the performing of capital operations, many years before his death; although he continued, up to within a comparatively short period preceding this event, to practise medicine. One of the last displays of his surgical skill and dexterity, in the class of cases just specified, was in cutting Judge Marshall for the stone in October, 1831. An interesting account of the circumstances accompanying this event, both as regards the reluctance of the great surgeon to undertake the operation, and the calmness and resignation evinced by Judge Marshall, even to his indulging in a sound sleep, just before it was performed, is given by Dr. Randolph, in his "Memoir." This gentleman tells us of the last operation of Dr. Physick, performed only a few months before his death. It was for cataract. The date at which he performed this operation, was the 18th of August, 1837. "I was present," says Dr. Randolph, "on the occasion, and watched him with the most intense anxiety. He was quite collected and firm, and his hand was steady; notwithstanding at the time he was laboring under great mental and physical suffering."

From about this date his disease is represented, on the same authority, to have increased in violence and intensity. The effusion of serum in the cavity of the thorax was accompanied by extreme oppression and difficulty of respiration, to such a degree indeed that he was unable to lie down for whole nights in succession, but was supported in a standing posture on the floor by assistants. Dr. Chapman, "his old and well tried friend and associate," was now requested to visit him, in conjunction with Dr. Randolph; but, although some ease was at times procured by their efforts for the suffering invalid, the disease con-

tinued to increase, and anasarca was added to hydrothorax. "To such an extent did the former prevail that the integuments at length gave way, openings were formed, and these finally ulcerated and became gangrenous.

"The Father of American Surgery expired without a struggle on the morning of the 15th of December, 1837, at twenty minutes past eight o'clock."

As might have been anticipated, there was a general expression of sorrow for the loss and of respect for the memory of this distinguished man, among various medical bodies in different parts of the Union. We need but refer, as matters of course, to the lengthened funeral cortege, including the students of medicine composing the Pennsylvania University and the Jefferson Medical College classes, and the trustees and professors of these two schools, as well as the members of the State Convention, then in session. In the same spirit were resolutions passed by the Faculty of the University. Similar resolutions were adopted by the Faculties of the Medical Institute of Louisville, and of the Medical College of Georgia, the Medical Convention of Ohio, and the physicians of St. Louis. "A comprehensive minute, commemorative of Philip Syng Physick, M.D., *Emeritus* Professor of Anatomy and Surgery, in the University of Pennsylvania," was prepared under the instructions of the Board of Trustees of the University, by Wm. Meredith, Esq., chairman of the committee appointed for the purpose. Its object was to tell of "the long connection of the deceased with the University, and to express the respect entertained for his able and faithful services as a teacher, for his eminence as a practitioner of medicine, and for the virtues which adorned his private character." In conformity with resolutions of the Faculty of the Louisville Medical Institute, and of the class in attendance, a glowing discourse, commemorative of Philip Syng Physick, was delivered by Dr. Charles Caldwell, January 12th, 1838. Dr. Horner read, at a meeting of the American Philosophical Society, May 4, 1838, a Necrological Notice of his deceased predecessor in the chair of Anatomy. A laudatory and dis-

criminating reference to the character and merits of Dr. Physick is contained in an introductory lecture delivered by Dr. Granville Sharp Pattison, Professor of Anatomy in the Jefferson Medical College, before his class, at the commencement of the session, 1838-9. The Medical Class of the University appointed Dr. Chapman to deliver an eulogy on his venerated associate. This was never done. The omission was not, we are sure, owing to any want of admiration and thorough appreciation of the meritorious services of the deceased; but rather, we must suppose, to a fear on the part of the eulogist that he might fail to do the subject entire justice by falling short of the standard which he had erected in his own mind. Dr. Randolph was intrusted with a similar commission by the Philadelphia Medical Society; and well and worthily did he acquit himself of the confidence reposed in him. If any disappointment be felt in the perusal of this "Memoir," it is at our not meeting with personal details, minute sketches, and an occasional apothegm or anecdote, calculated to place us more immediately in the company and enable us to get the measure of the man in private life, separated from the surgeon and the professor, who was so uniformly grave and formal in manner and sententious in speech. Dr. Horner attempted, in his "Necrological Notice," to give some Boswellian sketches, but with an awkwardness which, while it might be an evidence of sincerity, subjected its author to ridicule.* Let us add that the objections made to the details introduced by Dr. Horner apply more to the manner of presenting them than to the details themselves; which, being of a personal nature, are just such as we all like to know when we read of the eminent in their day. We would fain be placed in their company, and made to feel as if we saw them before us, and heard them converse, and that they were part of our common humanity—something more than mere lay figures placed in prescribed attitudes.

* The present biographer contributed his share, at the time, in turning aside some of the shafts discharged at the Necrologist, in a Reply to "A Brief Review" of the Notice, and hence he may be allowed to revert now to the subject.

Dr. Physick left testamentary directions for the disposal of his body after death, which excited much comment at the time, and calls for notice in this place. He forbade, in the most positive terms, any dissection of his body. No person was to touch it but two females, who had been his domestics for the last twenty years. It was not to be taken from his bed for some time, but was to be well covered up, and the room kept warmed until putrefaction had commenced. It was then to be covered with flannel, and placed on a mattress in a wooden coffin, painted outside. This coffin was to be inclosed in another or leaden one, closely soldered up. A public notice was to be given of the period of interment, but no invitations issued. The test of death, in beginning decomposition, was soon evident in a temperature so well fitted to bring it about; and the body was then inclosed in the manner he had enjoined, with the addition of another coffin covered with black cloth. A still further proof of the change which came over the mind of the teacher of *anatomy and surgery*, and of the weakened state of his intellectual faculties through disease, was exhibited in his directing that a careful watch should be kept over his grave for six weeks after his interment, to prevent his body, or, it ought rather to be said the body which once belonged to him but was his no longer, from being disturbed. If there was any validity or propriety in this prohibition in his own case, Dr. Physick acted under wrong influences, in fact, ran counter to the feelings of humanity in those memorable dissections of the dead from yellow fever which he made in 1793 and 1798, for the purpose of establishing the correct pathology of that disease. Will it be alleged that the examinations in these cases were, most probably, of the bodies of persons who, when living, were poor and friendless, and which were unclaimed by relatives or friends? But this does not alter the question, so far as the principle is concerned: it merely makes it one of convenience, to the exclusion of both the moral and scientific bearings of the subject. Dr. Physick, throughout his whole professional career, must have believed conscientiously that *post-mortem* examinations were not only justifiable, but highly useful and commend-

able; and that they contributed to the best interests of humanity by enlightening the physician on the seats of disease, and establishing the connection between symptoms and the suffering organs, so as to enable him, at the bedside, to infer from the former the condition and changes going on in the latter, and thus to shape his treatment with a better prospect of success. We speak positively of what must have been Dr. Physick's conscientious belief, knowing well that he would never have practised or sanctioned the practice of examinations of the dead unless he had entertained the most thorough conviction of its usefulness; for he was in an eminent degree an utilitarian, who yielded nothing to prejudice, sentiment, or fashion. His own uniform course in this matter through a long life will ever be regarded as an anticipatory caveat in the steps which he directed to be taken in the disposal of his body after death; if, indeed, it be thought necessary to bring the case into court at all, to be tried by the laws of custom, common sense, and humanity, in place of letting judgment go by default. The case, if one were to be made, would stand thus on the record: Dr. Physick, in all the vigor of his faculties, during a long term of years, as investigator of the internal changes caused by disease, *versus* Dr. Physick, on the borders of the grave, his mind weakened by numerous infirmities and sufferings, and refusing to allow of an examination of his body; thus depriving his professional brethren of an addition to their knowledge the like of which he had long been in the habit of receiving himself.

Dr. Physick might have pleaded the example of Dr. William Hunter, who, although himself a teacher of anatomy, is said to have manifested great antipathy to the idea of his own body being subjected to the scalpel of the anatomist. But the American surgeon went in direct opposition to the course which his celebrated English preceptor enjoined on his survivors, in his own case. Mr. John Hunter used, in the strongest language, to express his condemnation of those who should neglect to examine his body and preserve his heart, from a disease of which he had suffered so much, and from which he died. Twining, who has contributed useful facts and obser-

vations on diseases of the East Indies, and who made himself, and lays stress on *post-mortem* examinations, displayed similar weakness to that on which we are now commenting. How different were the injunctions laid by Jeremy Bentham on his friend and disciple in philosophy and political economy, Dr. Southwood Smith! The body of the great reformer was dissected in the anatomical theatre in the presence of a public assemblage, and a discourse pronounced on the occasion by Dr. Smith. Quite recently, the eminent Warren, of Boston, so well known in the annals of surgery, left similar directions, with the important addition, that his skeleton was to be prepared and set up in the Anatomical Museum. In our own city a gentleman of high rank at the Bar, and a trustee of the University of Pennsylvania, not long deceased,* expressly enjoined on his family that a careful examination of his body should be made after death; and his injunctions were complied with. So ought it to be; and so, in a vast number of instances, has it been from the case of him who has worn the kingly crown to that of the inmate of a hospital. Insight is, every now and then, obtained by this means into constitutional peculiarities and tendencies to disease in a patient, which are transmitted to his offspring; but the force and injurious operation of which may be greatly modified if not entirely restrained by a knowledge thus acquired, pointing to preventive measures, or, if disease have actually supervened, to a more successful treatment. The convictions of medical men respecting the great utility of the practice must be very decided to induce them to make examinations which are necessarily tedious and irksome, and would be every way disagreeable without the consolatory and encouraging conviction of the benefits thereby conferred on medical science and of gain to the interests of humanity.

After the preceding outlines of the professional life of Dr. Physick, let us sketch the appearance, manner, and character of the man. That he was habitually grave, approaching to

* Mr. Thomas I. Wharton.

the melancholic in his deportment and speech, was evident in looking for a moment at his pale statue-like face, which told of pain, of suffering and anxiety, but partially concealed by the enforced calmness of a strong will. What other expression could be expected in one whose health was always infirm, whose frame had been racked by violent attacks of different diseases, and who had his own "unwritten troubles of the brain." The occasional smile that lighted up his face came from no sunshine of the mind: it was the illumination of a wintry cloud by the moon's rays, cold and uncheering. But if his appearance did not attract by sympathy, it could not fail to do so by respect, not unmingled with curiosity to learn something about the possessor of those classic features,—high forehead, aquiline nose, thin and compressed lips, a finely formed mouth, and hazel eyes with their searching and, at times, penetrating gaze. The complexion was one of extreme paleness. In looking around one afternoon, now forty years ago, at the faces of the assembled members of the French Institute, the author of these pages was struck with the resemblance between La Place, the greatest among the great, and Dr. Physick, whose features but two or three years before had become so familiar to him in the lecture-room. The expression of countenance of the celebrated Frenchman, like that of the American, was almost purely intellectual, and in some of the mental characteristics of the two men, different as were their pursuits, a farther resemblance might be traced. The hands of our great surgeon were "small, delicate, and flexible," and would have won the favorable notice of Byron, as a mark of aristocratic descent and breeding. The same praise has not been extended to his lower extremities, and certainly there was no elasticity in his gait, nor a quick or jaunty step which might indicate a well-arched foot. Be this as it may, there was a time in the life of Dr. Physick, to tell of which seems like narrating a myth in early Roman story, when these feet of his were trained to dance, and to the performance of that most difficult saltatory feat, called "cutting the pigeon wing." The fact, however, of Dr. Physick being, "once on a time," a dancer, was mentioned by

himself in one of the many visits which he paid, in the latter period of his life, to a lady who was laid up by a fracture of the thigh. He was desirous of lightening the tedium of long confinement, under which his patient must often have suffered, and knowing, at the same time, both her strong sense and her social turn, he told her one day—apropos, perhaps, of the effects of age in producing gravity of deportment and disinclination to the amusements of the day—that he had not always been as she now saw him, but that he could once dance the pigeon wing. Suiting the action to the word, he actually rose, and taking hold of one of the bedposts, made a demonstration of his early agility—how successfully we never learned.

The author of the "Memoir," who knew him long and intimately, and whom we have already so freely quoted, states that Dr. Physick's "manner and address were exceedingly dignified, yet polished and affable in the extreme; and when he was engaged in attendance upon a critical case, or in a surgical operation, there was a degree of tenderness, and at the same time a confidence in his manner, which could not fail to soothe the feelings and allay the fears of the most timid and sensitive." Perhaps formally polite would better express Dr. Physick's manner and address than the extreme of polish and affability ascribed to them by Dr. Randolph. His punctiliousness, added to his habitual reserve and real dignity of deportment, must have made it impossible for any man, however long the acquaintance, to indulge in familiarity, or, as it is called, to take a liberty with him; and the most inveterate babbler and bore could hardly withstand the unmistakable intimations in his countenance and manner, as well as in his silence, that the interview must end. Nobody knew better, or practised more determinately the Horatian maxim, *est modus in rebus*, on these occasions, than Dr. Physick, when the visit to him was made for a specific object; and he received few others. Nor would he make an exception in favor of a garrulous or exacting patient, whose prolixity he would cut short by putting a few questions, and then declare that he had learned enough. The eminent Dubois (Antoine), the accoucheur of the Empress

Maria Louisa, was more brusque and equally intolerant of long narratives on the part of his patient. More than once the writer has heard him, in his gratuitous consultations, resembling those in our dispensaries, after he had gone through his clinical lecture and operations at the hospital, stop an old crone, in the middle of the wearisome detail of her feelings, by exclaiming: "Hold your tongue—I know it"—*Tais toi—je le sais*.

The style of dress worn by Dr. Physick showed the methodical man, who, while he adhered to the same color and very much to the same fashion of his garments, was always attentive to neatness and general harmony of effect. A blue coat with metal buttons, white waistcoat, and light gray or drab-colored pantaloons, made up his favorite attire. It must have been in his dancing days when he was seen with breeches and flesh-colored silk stockings. The bow-knot in his cravat, though it might fall short of dandy requirements, evinced care in its adjustment. His hair was combed backwards, *à la Chinoise*, so as to expose completely his forehead, while serving at the same time to give it the appearance of greater proportionate development. He was among the last to abandon the use of powder, but held on to the queue as long as he lived.

His personal habits were early formed and never underwent change. As Dr. Horner somewhat quaintly says: "He had passed his life in a certain diurnal movement and rotation, any deviation of which put him to inconvenience. He must have the bed that he was accustomed to; the same food dressed in the same way. His delicate health made him seek solitude as a refreshment; he was therefore no diner out; had no habits of conviviality; received no company in a familiar way, except now and then the call of a friend." But while thus keeping his own hours and fashion of repasts, he left his daughters free to receive visitors and to entertain them in the approved style of the gay and fashionable society in which they mixed. His dietetic formulary was very simple; an observance of it amounting to abstemiousness. The attack of typhus fever, from which he suffered in the winter of 1813-14, left behind it a chronically weakened digestion, accompanied with "a train of the

most unpleasant dyspeptic symptoms." He was also subject to frequent returns of catarrh. His treatment of himself was strictly antiphlogistic, backed by very low diet. "The small amount of food of which he would sometimes permit himself to partake, is almost inconceivable; and this for many days together." Dr. Randolph, who furnishes these particulars, gives it as his opinion, and probably he was correct, that Dr. Physick "injured himself, and in a measure produced the very enfeebled and prostrated condition of his system which attended him during the latter years of his life, by the excessively reducing system of treatment to which he had recourse." Dr. Randolph frequently expressed his regret at his using such meagre diet; to which Dr. Physick replied: "that he regretted it very much himself, and that he wished he could indulge in more generous living, but that he had accustomed his stomach for so long a time to abstinence from rich food that it was impossible now to make any change." When laboring under a severe cold, he confined himself to a warm room, and he had accustomed himself to a degree of heat at these times which was almost insupportable to others. He greatly enjoyed heat: in the winter he kept his bed-room at from 75° to 80° F. In continuing this practice he must have been oblivious of the theory of respiration and of the evolution of animal heat. Of the division of his time and the hours at which he took his meals we have previously spoken, when describing his business habits.

Both in his professional and business relations with his patients, he was governed by a strict sense of justice. He gave to them all the time and the attention which he believed their situation required, and he exacted from them, in return, a rigid adherence to his directions. Neglect of his wishes, or deception in this respect, he very properly stigmatized as a breach of faith on their part, which absolved him from the obligation of any further attendance on the case. Under the influence of the same principles, his pecuniary charges, in the form of fees, were always low, lower often than was recognized by general usage. In such cases, however, his concession to the patient was at the expense of his fellow-members in the profession, who, if

they kept to the usual tariff, subjected themselves to the unjust accusation of overcharging; and if they fell to Dr. Physick's usage, they could not obtain the income required by their wants from the fees to which in equity they were entitled. This other view of the subject is sometimes forgotten by physicians who have income independent of professional sources. The Doctor frequently, we are told, gave up large fees "when there was no adequate reason for it." "In the case of Judge Marshall, who was both an opulent and a liberal man, he refused positively a fee, and a sort of commutation was finally made by his consenting to receive a superb piece of plate." We confess ourselves at a loss to see the rule of action in this case. Where the gratitude of a patient so far outruns discretion as to offer remuneration disproportionate to his means and income, it is in a measure the duty of the physician to restrain such exuberance of feeling, and to return or refuse to receive the excess thus offered beyond the customary fees. But if the wealthy choose to indulge in a fit of liberality of this kind, as there is not the least danger of its becoming epidemic, we can see no good reason, derived either from professional duty or pride, for balking them in their good intentions. Sir Astley Cooper, a contemporary of Dr. Physick, and who commenced practice in London about the same time that the latter began in Philadelphia, had no misgivings on this score, although his professional income in one year exceeded \$100,000, or 20,000 guineas, and for many years it was \$75,000, equal to £15,000 sterling, and upwards.

An old rich West Indian, on whom Sir Astley had performed the operation of lithotomy with the most satisfactory results, asked what the fee was, and on receiving for answer, 200 guineas—a little over \$1000—rejoined: "Pooh, pooh! I shan't give you 200 guineas! there, that is what I shall give you," taking off his night-cap and throwing it at Sir Astley. "Thank you, sir," said Sir Astley, "anything from you is acceptable," and he put the cap into his pocket, anticipating, no doubt, the nature of the joke. Upon examination, the cap was found to contain a cheque for one thousand guineas! Examples of this nature

doubtless occur in the professional life of physicians, although, taken collectively, the number is not great. The tendency is, for the most part, in another direction, viz., to begrudge or to curtail the just and regular charges made by the physician for services rendered, although at the time they were thankfully received and acknowledged. Often a physician is complimented by his being told, "Doctor, I have paid all my bills but yours;" the life saved, or the agonizing pains removed, being deemed a thing of less moment than a supply of groceries, or the purchase of fine broadcloth or rich silks. It would seem, therefore, to be a duty which a medical man owes to his profession to resist this fashion of disparaging its usefulness, and to keep up to the generally recognized tariff of charges in all cases in which there is ability on the part of the former invalid to comply with its requirements. After enforcing the claims of justice, there will still be a large field for the exercise of benevolence in gratuitous attendance and advice for the relief of the sick poor, and of those in reduced circumstances, in which few physicians are backward to engage, whatever may be the degree of their natural sensibilities, their own necessities, or even their cravings for wealth.

It becomes a question of ethics, whether the money left in possession of the recovered sick man, in the shape of remitted or neglected fees, might not, if it had been received, be made to answer the purposes of undoubted and enlarged benevolence, by the physician's giving it in aid of well-known useful charities, or to help individuals whose distress comes immediately under his own observation. Some may answer, that the feelings that induce a physician to abandon his fees will prompt him to yield readily to the ordinary claims of benevolence; but this is far from being a general thing. It was not so with Dr. Physick. Money once received by him was held with considerable tenacity, and never spent with a liberal hand; but, on the contrary, it was always appropriated to some productive end, with a view to its yielding the best percentage. He would give his professional services, but he would not give his money; and his name was rarely seen among the contributors

to the benevolent enterprises of the day, or to older charities of the utility and stable character of which he could entertain no doubts. Unlike Dr. Chapman, his friend and colleague in the University of Pennsylvania, who was liberal both in his offers of assistance and in actual assistance to the students whose funds ran low, Dr. Physick was not known to indulge in either offers or loans. "His professional labors," as we are told by Dr. Horner, "sometimes produced twenty thousand dollars a year, and his method in this respect finally yielded more than half a million of dollars."* The fact must often have occurred to Dr. Physick that a no small proportion of this large fortune was derived from the receipts, and accumulated interest on their investment, from the chairs which he held in the University during a period of twenty-six years. Yielding to such reflections, it might, one would suppose, have seemed to him both natural and proper to leave some appreciative testimony of his grateful remembrances, of an institution which had been so largely instrumental in advancing both his fame and his fortune. Wistar and Horner, with less inducements of this nature, have made contributions and bequests to the Anatomical Museum, which will always associate their names with the University. In the case of the Pennsylvania Hospital, also, the early and long-continued theatre for the exercise and improvement of his surgical knowledge and skill, it might have been expected, almost as a matter of filial duty and affection, that he would have made a bequest to that institution, not merely with a desire of having his name longer remembered and cherished, but of contributing in a substantial manner to its more extended usefulness, both as a school for clinical instruction and for furnishing additional accommodations, which were then much wanted, but have since been supplied, for the comfort of the sick in its wards. It is true that, in common with all the medical and surgical officers of the Hospital, his services were rendered

* Wanting the requisite data, we can only express a belief that in this estimate of annual income should be included the receipts from his Chair in the University, which in his time must have averaged more than \$6000, per annum.

gratuitously. Dupuytren, unsocial and selfish, neither loving nor loved in that profession of which he was for a time the chief, still bethought himself of the means of adding to the already great facilities of medical instruction in Paris, and bequeathed \$40,000 to endow a Chair of Pathological Anatomy. This sum, by the good management of Orfila, himself in after years a liberal bequeather for similar purposes, has been chiefly appropriated to the formation and continued support of a rich museum of morbid anatomy. Orfila, although he left children, did not think he was doing them injustice by making benefactions for the advancement of medical science.

We wish that it were in our power to speak in a positive manner of Dr. Physick's religious creed and convictions. The character of his mind must have made it exceedingly difficult for him to arrive at the desired conclusions on this subject. The doctrines of theology occupied, as we learn from Dr. Horner, much of his attention, for twenty years before he died; "but," adds the writer, "it must be admitted, that he derived a very doubtful satisfaction from them." Some of the doubts which embarrassed him, do not imply a very enlarged view, or profound study, of the general ground of the dealings of the Creator with his creatures. His material logic failed to raise him to a knowledge and appreciation of the different kinds of evidence, and especially of that which goes beyond what "is furnished by a mathematical problem, or an ordinary natural phenomenon." Faith, that indispensable element in religious investigations, and in the religious character, he can hardly be said to have possessed,—deficient as he was in imagination. Without this faculty, it is impossible for the mind to lose sight of the hard realities, the materialism of life, and to believe in the evidence of things not seen,—or to picture to itself, or to receive the pictures by others, of a future existence. Hence, the little effect which followed his daily reading of the New Testament, in bringing his mind to the wished-for conclusions. We are not told in what his theological readings consisted; but there is reason to fear that they were pursued without method; and, hence, tended to em-

barrass rather than instruct. Amidst conflicting doctrines, elementary but essential truths are in danger of being overlooked and neglected. An acquaintance with these truths is an essential condition for our prosecuting our inquiries, with a hope of any satisfactory issue. Beginning on a wrong foundation, the whole superstructure, if we attempt to raise one, must be frail, and made up of incompatible materials. Thus, for instance, "some of the principal, perhaps *the* principal objections to the Christian revelation, have grown out of men's presumptions of the Divine character and administration, of what God must be, and of what God must do."* A careful study of Butler's "Analogy," would have shown Dr. Physick the inaccuracy of such fallacious premises, and the errors which must inevitably follow deductions from them. This great writer would have further commended himself to our searcher after religion, on account of the feebleness of his own imagination, which gave his reasoning a plainness of garb, with, it must be confessed, also, a lack of illustrations and graces of style, which, while diminishing their value to many readers, would have proved congenial with the mental constitution of Dr. Physick. His attention might also have been directed to the portraitures of characters, and resulting reflections in Law's "Serious Call,"—plain, practical, and of ready application.

A more encouraging view of the state of Dr. Physick's frame of mind, in reference to religion, at the close of his life, is held out by Dr. Randolph, who, after speaking of his extensive course of reading upon theology, which included many works of a conflicting and contradictory nature, and the gloomy and desponding views created at times in consequence, goes on to tell of his "uniform habit of perusing, every morning, a portion of the New Testament;" and when, in consequence of his illness and increasing infirmities, he was incapable of so doing, his children were constantly employed in reading this and other works of devotion to him. During his last illness, he

* Henry Rogers.—Notice of Joseph Butler, in the *Encyclopædia Britannica*.

derived great pleasure and satisfaction from the visits of his friend and pastor, Dr. Delancey, whose kind attentions towards him were unremitting. "I feel assured," is Dr. Randolph's concluding remark, "that the hopes and promises of the Christian religion, were the greatest sources of consolation to him in the closing hours of his life, and smoothed his passage to the tomb." We derive further encouragement from learning that Dr. Physick was forcibly impressed with a sense of the importance of religion, and of the sustaining power of religious belief, long before the decline of life, when he was represented, and we must needs think truly, to be beset with doubts and difficulties. In a "Brief Review" of Dr. Horner's "Necrological Notice" (1838), we read a portion of a letter written to a relative, by Dr. Physick, when he was resident physician in the hospital at Bush Hill, during the season of the prevalence of yellow fever, in 1798. He writes, "Make yourself easy about me; I am doing my duty; and I am at present quite easy, in the belief and certainty that I am in the hands of a most merciful God, in whom alone is all my dependence. What support and comfort does the Christian religion afford me!"

Still, it is not the less true, that the mind of the great surgeon was very much disturbed and unsettled, on the subject of religion, some years before his death. We would fain believe that the difficulties chiefly arose from his indiscriminate reading on theology, to aid him in the quest of a special church creed, rather than a general Christian one; and that "the works of a conflicting and contradictory nature," which puzzled and distressed him, were on dogmatic theology, rather than on the "Evidences of the Christian Religion"—about which alone, there could be nothing "conflicting and contradictory," in the writings of any of the schoolmen or divines, whether Protestant or Catholic—a Paley, or a Wesley, or a Wiseman. If he aimed at strengthening and enlarging his convictions of the elementary truths of Christianity by theological lore and metaphysical disquisition, he labored under great difficulties, both on account of the constitution of his mind, and the lateness of the period of his life, in which he began these kinds of studies.

His perceptive were more active than his reflective faculties; and he never evinced any readiness to trace the relations of cause and effect; nor, of course, any fondness for what is called the philosophy of mind, as contrasted with that of matter. His reading, never extensive, was rarely of a connected nature, so as to allow him to study a subject to its full extent, or in its various bearings. Even on professional subjects, it was, for many years, in a great measure desultory, and rarely went beyond that of a notice of a new remedy or a new prescription. It is not improbable that much of his theological reading was in the same fashion; and hence his disappointment, when he could not gather at once, what might seem to him available formulas of faith, or find a *Codex Pietatis* adapted to his present feelings and spiritual wants.

But there was another and serious obstacle to his theological readings leading to a profitable end. He began them after his habits of action and of thought had become so fixed as to become almost a second nature. We all know that late learning is hard, and for the most part very imperfect learning, whether it be of an art, or a trade, or a science; whether it requires flexibility of limb or flexibility of mind. How much more difficult is the late learning which is to lead to a knowledge of man's nature, and of his relations and duties to his Maker and to his fellow-men? Not only is there less ability, less quickness of perception, less readiness of combination, but there is less docility, less teachableness, at an advanced than at an early period of human life; and yet if religion is to be the subject of study, the chief, if not only hope of making any satisfactory progress, as late learners, must rest on our approaching it in a docile and ingenuous mood. Unhappily for himself, and for others who may be influenced by his example—who hesitate because he doubts, and are chilled because he is cold—a man in advanced life, especially if he have been accustomed to play the oracle, or to guide and dictate in other matters, makes his approaches in a magisterial mood, or is ready with the arts of cunning fence to foil an opponent, rather than as an humble searcher after truth, conscious of his own weakness, and earn-

estly interceding for illumination of his path of inquiry, and strength to carry him to a successful issue.

If these be the risks and difficulties which beset us in an attempt to be initiated, and at the best this can only be partial, into the mysteries of religion, and to ascertain the grounds on which our religious belief rests, the inference is clear, that the search must be begun in early life, when the intellect is most ready and the feelings of devotion most fresh, when the transition is so easily and naturally made from love of the earthly to that of the heavenly Father, from veneration for age to that for the Eternal. Impressions made in early life, when the mind is in a plastic state, are never effaced—they survive cares, sickness, sorrow, the shock of the angry passions, a long career of folly, of vice, and even of crime itself. They were made by a father's watchful care, a mother's tender prayer; they are revived and come up in the darkest hour, and, like the standard in the heavens which gave Constantine confidence and victory, snatch us from despair and restore us to hope and faith. Feeling our own unfitness and unworthiness to pursue this theme, we will conclude in the words of the plain-speaking and honest John Foster, the greatest of religious essayists: "How often we have been struck with wonder in observing some of you, dwelling with delight and pride on the prosperous introduction into life and the fine prospects of one and another branch of your family, and evidently with an entire inadvertence to any greater concern affecting their welfare. Secure the primary object of their passing through life in a handsome style, in fair repute, and with plenty of the world's accommodation at their command, and that other affair of their being accountable to God, of its being their chief business in life to be his servants, may be left as an insignificant matter, about which you do not, and they need not take any trouble."*

The biographer enters now on a grateful theme. Hitherto we have traced the progress of the man from the morning to the

* An Essay on the importance of considering the subject of Religion, addressed particularly to Men of Education.

setting sun of his life, and recorded the distinctions and honors acquired in his professional and professorial career. It remains for us, in conclusion, to enumerate his contributions to surgery, that branch in which he more peculiarly excelled. These will be found to belong more to the practice than to the science; but, while the former always engaged his preference, the latter seemed, on different occasions, so distinctly to point the way, that it is not easy, even if it were necessary, to separate them. Reference was made in a preceding page of this biography to the large and thorough foundation for the subsequent fame and usefulness of Dr. Physick in his long period of probationary medical study before he went to Europe, and the uncommon opportunities he enjoyed when there, under John Hunter and in St. George's Hospital, for obtaining an intimate acquaintance with anatomy and the details of surgical practice. When required to act for himself, he must have been prepared, by meditating on the principles laid down by his great teacher in his lectures on surgery, and more especially on sympathy, to find serious constitutional disturbance often caused by local injury, and hence to feel the necessity of exercising continued vigilance in protecting the noble organs from the shock which they would receive in the surgical act of removing a limb, excising a tumor, or taking up an artery for aneurism. He would measure in his own mind their capability, and that of the organism generally, to bear up and react under the depressing influence of pain and loss of blood, and the extent of their endurance of subsequent irritative fever, following a capital operation. Of the stock of recuperative energy probably possessed by the patient, and the ability of the surgeon to check secondary inflammation, he would predicate the chances of the healing process being set up and gone through in a satisfactory manner, and the reasonable grounds for success from his operating. In his counting of probabilities, he would take into consideration the age, constitution, habits, and prior and actually concomitant disease of his patient. With him it would not be a question merely of his ability to perform the operation without his patient dying a few hours afterwards, but, still more, whether an

operation would not only remove the existing infirmity and suffering, but prolong life. So, also, on the other hand, he must have been aware, that by the same laws of sympathy, as taught and explained by Hunter, an abatement or removal of a local and external irritation, or disease—a wound or an ulcer—would be greatly accelerated by measures addressed to the general system through the great internal organs, and especially the stomach as the chief of the digestive apparatus. He would know that in this way, by persevering in a constitutional treatment, both therapeutical and dietetic, aided by appropriate topical applications, he might save a member which, under the influence of merely empirical and mechanical surgery, would otherwise be doomed to amputation or excision.

Whether or not the reader may choose to attach any value to the preceding sketch, as really indicative of the pathological doctrines and opinions with which Dr. Physick began his career in surgery, it cannot be doubted that he was thoroughly imbued with the conservative views of John Hunter, whose saying he must often have heard, viz.: "To perform an operation is to mutilate a patient we cannot cure: it should, therefore, be considered as an acknowledgment of the imperfection of our art." Under this belief a true surgeon, as distinguished from a mere manipulator and dissector, a cutter and a bandager, will bring all the resources of medical science to his aid, with a fixed intention of saving vital structure and prolonging life, but with no desire to exhibit himself by feats of dexterity and despatch, at the expense of his patient. He is not continually brandishing his instrument—knife, gorget, or bistoury—like a harlequin his wand; nor is he, like the latter personage, eager to play with it all kinds of fantastic tricks, under the name of brilliant, or dashing, or difficult operations. He, on the contrary, holds it back, concealed, until the very last extremity, nor will he then have recourse to it on the plea that other means have failed, if he cannot promise himself decided benefit to the patient by its use.

The first application of the philosophy of surgery, which was made by Dr. Physick, was in the treatment of ulcers in

Hunter's
conservative

the Pennsylvania Hospital. Avoiding the empirical course which had been previously pursued, he resorted, in the treatment of inflamed and irritable ulcers, to one founded on principles. "He directed the patient to be confined to bed and to be kept strictly at rest, and in cases where the ulcer was situated upon the lower extremity, he caused the limb to be considerably elevated. Constitutional treatment was carried on at the same time, and soothing applications were made to the ulcer. When topical stimulants were resorted to, he always preferred their being used when the patient was confined to bed."

He also made valuable modifications and improvements in the treatment of fractures, one of the most noticeable and best remembered, because still used, is in that of the celebrated apparatus by Desault for fractures of the thigh. By increasing the length of the splint, Dr. Physick procured a more complete counter extension to be made in the direction of the axis of the limb, and also insured more certainty of rest to the patient. The apparatus thus modified, and with the block attached to the lower extremity of the splint, as introduced by Dr. Hutchinson, for the purpose of making extension in the direction of the limb, was regarded by Dr. Physick as the most complete and successful method of treating fractures of the thigh ever invented. It is that which for a term of years has been used in the Pennsylvania Hospital with the best effects. He was equally successful in inventing a method of treating fractures of the humerus at or near the condyles, so as to prevent deformity and restore the entire use of the limb. His plan of treating fracture of the lower end of the fibula, accompanied with dislocation of the foot outwards, was precisely similar to that recommended by Dupuytren. Dr. Randolph, from whom we freely borrow in this enumeration of Dr. Physick's improvements in surgery and of his operations, is unable to say to which of the two great surgeons the priority of invention is due.

In the treatment of dislocations, Dr. Physick carried into full effect the plan of venesection so as to produce fainting, "as

originally suggested by Dr. Alexander Munro, of Edinburgh." We find that the writers in the *Dictionnaire de Médecine* and *de Chirurgie Pratiques* attribute this practice to the Italian, Flajani. By this means, "old and difficult dislocations have been reduced, and limbs restored to usefulness which otherwise would have been irrecoverably ruined." It is not to be forgotten, however, that there may be circumstances in the state of the patient: advanced age, shattered constitution or anemia, which would make the loss of blood illy borne, and in which such relaxants as tartar emetic or tobacco, and especially the first, may be substituted with advantage.

Dr. Physick's first operation in lithotomy was performed in 1797. He was early led to suggest a valuable improvement in the gorget, as used by Mr. Cline, so as to facilitate division of the prostate gland and neck of the bladder, which since then has been almost universally employed in this country. A full description of Dr. Physick's gorget was published in "Coxe's Medical Museum," for the year 1804, by Mr. R. Bishop, surgeon instrument maker. It is also noticed in Dr. Dorsey's "Elements of Surgery." The modification consists in having the gorget so constructed that a perfectly keen edge may be given to that part of the blade which commences the incision, and which is connected to the beak of the instrument. For this purpose the beak and blade are separable, and so arranged that the blade may be connected to the stem and firmly secured by a screw. Without this arrangement it is exceedingly difficult to impart a fine edge to that part of the blade which is contiguous to the beak, and inasmuch as the incision of the neck of the bladder is commenced at that point, the success of the operation must necessarily be much influenced by it.

In performing his first operation of lithotomy, he accidentally divided the internal pudic artery with the gorget, and a profuse hemorrhage was the result. The forefinger of the left hand having previously compressed the trunk of the artery, the point of the tenaculum was passed under the vessel, and a ligature cast round it and firmly tied; but it was found that a

considerable portion of the adjacent flesh was also included in the ligature. In order to obviate similar inconvenience in future, Dr. Physick subsequently contrived his forceps and needle for the purpose of carrying a ligature under the pudic artery. This useful instrument is equally applicable to other cases in which it is desirable to take up a deep-seated artery that cannot be reached by the customary methods. Twice has it been used in the operation of tying the external iliac artery : in the first instance by Dr. Dorsey, and in the second by Dr. Randolph. Numerous modifications of the forceps and needle have since been made, which, in some instances, being close imitations, were regarded by Dr. Physick as tending, if not intended, to deprive him of the merit of originating the instrument, and hence occasionally elicited from him a very decided declaration of his rights in the matter. The writer remembers hearing him claim his own in the course of a lecture in the surgical amphitheatre with very marked feeling. Dr. Randolph, a competent, even if he be regarded as a partial, judge, declares his belief that "the original instrument, as designed by Dr. Physick, has never been excelled either in point of ingenuity or ability."

A case of suppression of urine in the Pennsylvania Hospital, in 1794, of forty-eight hours' duration, in which Dr. Physick found it impossible to introduce a catheter of the smallest size into the bladder, led him to make trial of a bougie appended to an elastic catheter, so that the former might act as a guide to the latter, through which, when once introduced by this means, the urine would readily flow. The experiment was quite successful. A full description of the bougie-pointed catheter is given in "Dorsey's Elements of Surgery." An account of the case was communicated by Dr. Physick to Dr. Miller, and was published by the latter in the "New York Medical Repository," vol. vii, p. 85, together with the method of preparing the instrument, and some experiments on the treatment of gum-elastic by spirits of turpentine and ether ; also a description of the process of coating catheters with gum-elastic. Dr. Physick made the treatment of strictures of the urethra a subject of

careful study, and was celebrated for the tact and dexterity which he exhibited in dilating them. In the year 1795, he invented an instrument for the purpose of cutting through a stricture, which was intractable to the ordinary methods of treatment. This instrument consists in a lancet concealed in a canula, which is pressed down to the stricture, and then the lancet is pushed forward so as to effect its division. After the stricture is cut through, a catheter or bougie should be introduced and worn for some time, in order to produce the requisite degree of permanent dilatation. This mode of treating obstinate strictures has been found so successful "as to entitle it to be considered one of the most important and useful operations in surgery." It may be had recourse to in cases of complete retention of urine, so as to obviate the necessity of puncturing the bladder. Dr. Randolph claims for Dr. Physick the credit of being "the first who pointed out to our surgeons the method of constructing the waxed linen bougie." He gave it the preference over either the metallic or gum-elastic bougies.

In the year 1802, Dr. Physick gave fresh proof of the way in which practical surgery may be deduced from a careful study of pathological changes going on in the tissues. It was such as no empirical guessing could ever have hit on. We advert now to his proposal of passing a seton between the ends of an ununited fractured humerus, for the purpose of stimulating the parts to a deposition of callus, and thereby producing a consolidation of the broken bone. The case in which this practice was first tried was that of a seaman in the Pennsylvania Hospital, whose left arm had been fractured eighteen months previously, while he was at sea. At the expiration of five months after the performance of the operation, he was discharged from the hospital perfectly cured; his arm being as strong as it ever had been. An account of this case, written by Dr. Physick, appeared in the "Medical Repository of New York," vol. i, 1804, and it was republished entire in the "Medico-Chirurgical Transactions," vol. v, 1819. Chance afforded Dr. Physick an opportunity of seeing the man—at the time a patient of Dr. Randolph—on whom he had performed this operation, twenty-

eight years previously. This person declared that he had never suffered any inconvenience since the operation, and that his fractured arm was quite as strong as his other arm. On the death of his patient, Dr. Randolph obtained permission to make a *post mortem* examination, and produced the humerus. "At the place of fracture, he found the two ends of the bone to be perfectly consolidated by a considerable mass of osseous matter, in the centre of which there is a hole, showing the place through which the seton passed." The superiority of the use of the seton, in cases of this nature, "over the method not unfrequently resorted to, of cutting down to the ends of the bone, and sawing them off, as recommended by Mr. White, of Manchester," is strongly affirmed by Dr. Randolph. A complete refutation of the misstatements unintentionally made by Mr. Lawrence, in his surgical lectures, respecting the use of the seton in ununited fractures, has been furnished by Dr. Hays, the editor, in the "American Journal of the Medical Sciences," vol. vii, in the shape of a brief summary of numerous cases successfully treated by this means.

A still greater boon to humanity than any previously conferred by Dr. Physick, was his operation for the cure of artificial anus, which he performed in the month of January, 1809. Dr. Granville Sharp Pattison, Professor of Anatomy in the Jefferson Medical College, while paying an animated tribute to the memory of Dr. Physick, in his introductory lecture, November, 1838, uses very emphatic language respecting this operation. It is the more entitled to notice, on account of the anything but friendly relations which had previously existed between the author of the lecture, and the medical faculty of the University. He had just adverted to the numerous improvements which Dr. Physick had introduced into surgery, and the difficulty of saying which of them was the most influential "in advancing and elevating our science." He then proceeds in the following strain: "The one I select, is his improvement in the treatment of *Artificial Anus*; and I hesitate not to assert, that there is not to be found, in the whole circle of the science, any single discovery which indicates higher power of philoso-

phical induction than the one under consideration. It was no random, no chance discovery. It was not, and it could not have been made by accident. It was based on anatomical knowledge, and perfected by inductions derived from her hand-maids, physiology and pathology." It is not necessary that we should describe this operation, the details of which are now so well known. Reference may be made, however, to a full account of it, given by Dr. Benjamin Hornor Coates, in the "North American Medical and Surgical Journal," for October, 1826, which is otherwise valuable by the remarks of this gentleman on Dupuytren's method of operating in the disease. On this occasion Dr. Coates shows in the most convincing manner, that Dr. Physick long preceded the French surgeon in operating for the cure of artificial anus, a point contested by Dupuytren and others, but fully admitted, many years later, by Roux, his successor, and, it may be added, long his rival. To all useful intents and purposes, our great surgeon must be regarded as the inventor of this operation; for, even though it could be shown that a similar one had been performed by others, the fact had remained, and would have continued to be generally unknown, without its suggesting repetition or imitation. That the conception of the operation, and the pathological process which would render it efficient, were original with Dr. Physick, and that he believed himself to be the first to perform it, cannot be questioned by those who know his sincerity and truthfulness. Once fully engaged in the exercises of his profession, he read but little, and his reading was, we believe, never of a retrospective nature. His study was of the present realities before him, and of the best means of making them subservient to his immediate purposes, without inquiring into or caring for the opinions or practices of the past, and seeking in them hints and suggestions for his own guidance. If he had any retrospective lore, it was that gathered in his early studies, when serving his novitiate, and most probably even in its first period, or before he went to London to be placed under John Hunter. A more direct instance of his making what he believed to be an original suggestion, occurred in his proposing

the use of animal ligature, in which he had been anticipated by one of the older surgeons. Dr. Randolph, when telling us that from the year 1816 (see "Eclectic Repertory," vol. vi), Dr. Physick employed, almost exclusively, animal ligatures, adds the expression of his regret that they are but seldom used by the surgeons of the present day.

Dr. Physick, in a journal or note-book of the most remarkable and interesting cases which occurred in his surgical practice, records the case of a lady affected with blindness from cataract. The operation was by extraction of the opaque crystalline lens, and resulted in the restoration of the patient to sight. This was his favorite operation for cataract, whenever the eye was in a suitable condition, and such was his care in selecting proper cases, and in preparing them when necessary by previous treatment, and his manual dexterity, that he was almost always successful. It is mentioned by Dr. Randolph, as "a singular coincidence," that as the first case recorded in his note-book was of one in which he performed extraction for cataract, so the last operation he ever performed, on Aug. 18th, 1887, was of the same kind, and attended with the like success.

Dr. Physick gave an account, in Chapman's "Philadelphia Journal of the Medical and Physical Sciences," vol. i, 1820, of the method which he employed for the removal of enlarged tonsils, and hemorrhoidal tumors, by means of the double canula and a soft wire. In place of allowing the instrument to remain applied, as had been previously the custom, until the parts were separated and thrown off, a process requiring a week or ten days for its completion, it was his practice to remove the wire at the expiration of twenty-four hours, a period proved by experience to be long enough for strangulating the tumors, and destroying their vital connection with the structure to which they had been attached. A few years after this, he became convinced that excision was the preferable operation for the removal of enlarged tonsils; and to accomplish this end he contrived, very ingeniously, an instrument, which was

adapted also to excision of the uvula. A full description of it will be found in the "Am. Journ. of the Med. Sciences," vol. i, together with the very interesting case of a young lady afflicted with an obstinate cough, occasioned by an elongation of the uvula, who was entirely cured by Dr. Physick, by means of the excision of a portion of that organ. The success in this and some other analogous cases soon gave vogue to the operation for excising, or cutting, or, as some familiarly called it, clipping off the uvula. To have a teasing cough, and a uvula somewhat elongated, or believed to be so, was the signal for excision. The fashion prevailed very extensively among clergymen, so many of whom suffer from chronic laryngitis and bronchitis; and he who had undergone the operation himself seemed to feel it to be his duty to recommend a clerical brother who coughed to submit to the like process, so that, after a while, one could not help thinking of the travelled fox, in the fable, who returned to his comrades minus a tail, left very much against his will in a trap, but who proclaimed this curtailment to be the last and most approved fashion, and, as such, worthy of general imitation. One cannot help regretting the vast amount of misapplied missionary labor on the part of many clergymen, in their zealous, and too often inopportune recommendations of not only popular modes of practice, but also of popular quackeries, which exert about as beneficial an effect on the bodies of those who freely resort to their use, as Millerism, Mormonism, and Spiritual Mediums do on the souls of the believers in their doctrines. After a time, a more general knowledge of physical diagnosis of diseases of the chest, in which cough is a common symptom, led to a true appreciation of the value of uvular excision, and, of course, to a considerable restriction of the practice.

Dr. Hays, in the second volume of the "Am. Journ. of the Med. Sciences," published a description and plate of a forceps invented by Dr. Physick, and employed in certain cases to seize the tonsil and draw it out, so as to allow more conveniently of its extirpation.

In cases of hemorrhoidal tumor, where the complaint was of

long standing, and the lining membrane of the rectum much diseased, and where the tumors were internal, Dr. Physick preferred and continued to use the ligature for their removal. The drawing at once a wire tightly round the base of the tumor gives momentary pain; but it is less severe than might be expected. At the end of twenty-four hours, when the wire may be removed, "the tumor will be found shrivelled and black, and in a few days will be separated and thrown off under the application of a soft poultice of bread and milk." Care must be taken, as enjoined by Dr. Physick, that nothing but the hemorrhoidal tumor itself be included within the ligature.

An operation for varicose aneurism, performed by Dr. Physick, is described by him in Coxe's "Medical Museum," vol. i. In the same journal he details the history of a case of luxation of the thigh-bone forward, and the method which he employed for its reduction. The "Philad. Journ. of Med. and Phys. Sciences," vol. iii, contains the particulars of a case of carbuncle, with some remarks on the use of the common caustic vegetable alkali in the treatment of this disease, which he divides into three stages. It is in the second stage, in which "inflammation having ended in the death of the cellular texture in which it was situated, a process begins for making an opening through the skin, to allow the dead parts and acrid fluids to pass out." It is in this stage, marked by the appearance of pimples and small orifices, "that the application of the vegetable alkali upon the skin so perforated, and on that covering the middle of the tumor, in quantity sufficient to destroy it completely, proves highly beneficial."

We shall next notice, in a summary manner, the contributions made by Dr. Physick to Pathology and Practical Medicine. They are not numerous, but they are all of them of permanent value, either by removing previous obscurities, or enlarging the domain of therapeutics. During the period in which the yellow fever appeared in Philadelphia, in 1793, he, in conjunction with Dr. Cathrall, published an account of several dissections of persons who had died of this disease. The results, as given in "Brown's Gazette," though not abso-

lutely original, were more definite and clear than had been previously described by Dr. Mitchell, in the yellow fever as it prevailed in Virginia in 1787 and 1741, Dr. Mackittrick, in his inaugural thesis at Edinburgh, 1766, Dr. Hume, in his account of the yellow fever of Jamaica, and of Dr. Lind, in his notice of the disease as it prevailed in Cadiz in 1764.* The introductory paragraph of the newspaper account of the dissections made by Drs. Physick and Cathrall, to which their names are appended, contrasts strangely with the testamentary directions by the former for the disposal of his body after death. They say: "Being well assured of the great importance of dissections of morbid bodies in the investigations of the nature of diseases, we have thought it of consequence that some of those dead of the present prevailing malignant fever should be examined." After stating the general soundness of the brain and the thoracic organs, they proceed to say, "That the stomach and beginning of the duodenum are the parts that appear most diseased. In two persons, who died of this disease in the fifth day, the villous membrane of the stomach, especially about its smaller end, was found highly inflamed, and this inflammation extended through the pylorus into the duodenum some way. The inflammation here was exactly similar to that induced on the stomach by acrid poisons, as by arsenic, which we have once had an opportunity of seeing in a person destroyed by it." "A black liquor" was found in the stomach and intestines, which had been vomited and purged before death. "This black liquor appears to be clearly an altered secretion from the liver; for a fluid, in all respects of the same quality, was found in the gall-bladder. This liquor was so acrid that it induced considerable inflammation and swelling on the operators' hands, which remained some days." In subsequent observations the authors ascertained, with more precision, the real nature of the dark-colored fluid in the stomach and small intestines, which is identical with that

* Writers quoted by Dr. Rush, in his Account of the Bilious Remitting Yellow Fever, as it appeared in Philadelphia in 1793.

ejected, and known under the name of "black vomit"—altered blood given out from the vessels of the stomach. It is but just to add that dissections made by Dr. Deveze, in 1798, and published in the following year, reveal a state of the lining membrane of the stomach similar to that described above. This writer speaks also of the black blood mixed with the black bile in the gastric cavity.

Dr. Physick confirmed and extended his experience gained in 1793, by additional dissections during his residence in the City Hospital in 1798, a brief notice of which is made by Dr. Rush, in his history of the yellow fever of that year. He mentions that the matter which constitutes what is called the *black vomit* was found in the stomach of several patients who had not discharged it at any time by vomiting. He observed, also, the greatest marks of inflammation in the stomachs of several persons in whom there had been no vomiting during the whole course of the disease.

It would be arrogating too much to claim for Dr. Physick and his associate in pathological investigations on the organic seat of yellow fever, the first knowledge of its gastric character, and of the origin and nature of the black vomit; but certainly their observations had a dominant influence on the medical teachers and writers of Philadelphia, and contributed a full share in other directions in imparting something like fixedness of opinion on this part of the pathology of yellow fever.

In the winter of 1798 a paper was read by Dr. Physick, before the Academy of Medicine of Philadelphia, containing "Some Experiments and Observations on the Mode of Operation of Mercury on the Body," which was subsequently published in the "New York Repository," vol. v. p. 288. Although falling short of the chemical requirements of the present day, these experiments exhibit evidences of a spirit of careful scrutiny and cautious induction which it would be well always to imitate in experimental investigations.

In 1802, Dr. Physick communicated the particulars of a case of hydrophobia for the journal just mentioned. After giving a detailed account of the appearances exhibited on dissection,

he suggests, as a means of relief in this disease, the propriety of tracheotomy in conjunction with other parts of the treatment.

A practical recommendation of great importance was made by Dr. Physick in Coxe's "Museum" for 1805. It consists in the use of blisters for the purpose of arresting the progress of mortification. He was led to this practice from a knowledge of the good effects of the remedy in arresting erysipelas, a mode of treatment which he had learned from Dr. Pfeiffer, of Philadelphia. In order to procure the best effects from the blister, it should be large enough to extend from the mortified to the adjacent sound parts.

Dr. Physick, although he did not originate the suggestion, which should be credited to Dr. Alexander Munro, Jr., of Edinburgh, who gave it in his Inaugural Thesis, 1797, must have credit for being the first to carry it into practice many years in advance of its reputed inventors in our own day. Our reference is to the introduction of fluid into the stomach by means of a gum-elastic catheter and a common pewter syringe, for the purpose of diluting poisonous substances which have been swallowed, and then of withdrawing them by the same apparatus, thus accomplishing what is now done by the stomach pump, or an instrument made expressly for this purpose. The circumstances, as detailed in the "Eclectic Repertory," for October, 1812, were, that a mother, by mistake, gave an overdose of laudanum to two of her children, twins, aged three months, which produced convulsions and stupor: the pulse and respiration had almost ceased. As these children were unable to swallow, Dr. Physick injected one drachm of ipecacuanha, mixed with water, by the means already described. No effect resulting, he injected a quantity of warm water, and then withdrew it by means of a syringe. These operations were repeated again and again, until he had washed out the stomachs thoroughly and removed all their contents.

"By the time these operations were completed, however," writes Dr. Randolph, "all signs of animation in each of the children were entirely lost. Discouraging as these circumstances were, the Doctor determined to persevere in his efforts to

restore life, and accordingly he injected into their stomachs some spirits, mixed with water, and a little vinegar; and he also made use of external stimuli. In a few moments the pulse and respiration returned in each child, and in the course of a short time both were regularly performed." The results were that one of the children completely recovered, the other died. Dr. Physick, in a note to this paper, states that the idea of washing out the stomach in cases in which poisons had been swallowed, occurred to him at least twelve years previously; and that his nephew, Dr. Dorsey, had performed the operation of washing out the stomach in such a case in the year 1809.

Dr. Physick did not introduce new remedies, but he did more: he modified the preparation or the dose of familiar articles, with a rare nicety of adaptation in the particular circumstances of the case, thus giving a character of freshness and originality to his suggestions, which were often highly appreciated by his medical brethren in consultation. He had, it is true, the advantage which every man of eminence enjoys whose advice is invoked at an advanced period of the disease. He learns what has been done; what effects have followed certain remedies or classes of remedies: he finds, for example, that the patient has been bled and otherwise depleted, and that the period of excitement is passing away, and he comes just at the opportune moment to counsel the use of stimulants and tonics, and a little increase of nutrimental substances; probably just at the time when the attending physician had himself proposed to advise these measures. The superficial observer sees in the means recommended a change of practice, where the experienced one sees only a continuation of treatment varying with the change in the stage of the disease. The administration of tonics and stimulants to-day is no evidence of error on the part of the physician, who, two days or even twenty-four hours before, had enforced venesection or leeching, and active purging. The crisis of a fever, followed as it often is by feelings of great languor and prostration, alarms the friends of the patient and prompts them to a request for additional medical counsel, at a time when, in fact, the danger is over. Hence a physician of

experience, and who is imbued with sound ethics, when called into consultation, although he may get credit for the subsequent rally of the enfeebled powers of life, will have the good sense not to suggest any very decided course of treatment, but, waiting for time and nature, he will give his approval of the previous treatment. We have heard it said that, on one occasion, the friends of a patient who was under the care of an eminent French physician, becoming uneasy about him, for there are fits of panic on such occasions not explicable by the facts of the case, requested that Dr. Physick might be called into consultation. The request was of course complied with; and on his seeing the sick person, he felt that nothing additional to the actual treatment was necessary. But, that he might not seem to be indifferent to the case, he suggested the use of a few grains of magnesia, which were taken by the patient, who soon recovered, to the great joy of the friends and to the credit of the consulting physician, to whose timely visit and advice the salutary result was attributed.

Dr. Physick abjured all theories and systems in the practice of medicine. He would neither advance any guiding principle on which could be based the treatment of a class of diseases, or of many cases having characters in common, nor listen with patience to an attempt on the part of a professional *confrere*, in consultation, to make such an exposition of the views by which the latter had been governed in the treatment of the case before them. If he recommended a remedy or a mode of practice, it was not to meet certain indications or to remove certain pathological conditions, but because he had found the remedy or the mode of practice useful in another case—giving often the name of the individual—which resembled this one. His practice was based on enlightened empiricism, a careful and minute observation of the *juvantia et ledentia*—what had done good and what was injurious; but here he exercised those reasoning powers which, in what seemed to be theory or systematizing, he chose to place in abeyance; for he so modified and changed, as already observed, the mode or the time of giving the remedies, as to imply, in his mind, a certain hypothetical

state of things which he proposed to himself to change by a new combination of means. He professed, however, to acknowledge no guide but experience; forgetting the remark of Hippocrates, echoed by Boerhaave and others, that experience is often fallacious—" *Experientia fallax* ;" and probably never having read the admirable treatise on the subject by Zimmerman. That experience, which is merely the knowledge of antecedent facts or events, must have had a beginning; and if so, might we not sometimes trust to trials suggested by a long previous study of the relations of successive antecedents, even though we may call it theory, with at least as much confidence as to unforeseen chances from which all experience must date? But, after all, what are called the results of experience are not deductions from a series of precisely identical facts or phenomena ranged in the memory like a string of beads. In the facts or phenomena there are differences which we throw out, and resemblances which we choose to retain, as representing a continuous chain of occurrences, so that the reasoning powers are actively at work, and the most doggedly practical, and the greatest sticklers for experience, are obliged, in despite of themselves, to combine and arrange things in their own minds, different from the actual realities before them, and to draw inferences which they may call the results of experience, but which in truth are the product of a theory, however simple and elementary it may be. The chief difference between your men who cling to experience and profess to eschew theory, and those who avowedly and conscientiously employ theory to fix in their minds a series of complicated events and to guide them in future inquiries, amounts very nearly to this: that the former theorize only from their own observations, while the latter theorize both from their own and those of preceding times, thus bringing the wisdom of the great departed to enlighten their own judgments.

Dr. Physick's inflexibility in adhering to his opinions when once formed, and which made him insist on obedience from his patients to his advice and prescriptions, did not, however, interfere with his careful reconnoissance of the ground before he

took his stand, or with his groping, as it were, his way in the paths of doubt before he reached the desired conclusions. The objections made by the invalid to what he proposed giving were listened to attentively, and as far as they rested on idiosyncrasies, or on positive disability of function, were treated with deference. When he saw that the issue ought still to be made between his prescriptions and the disease, but was aware that it could not be met directly, he was content to accomplish his object in an indirect manner. An instructive example of his mode of prescribing in such circumstances is related by Dr. Randolph. The case was one of a lady laboring under dyspepsia of the most aggravated character, for which she was brought to Philadelphia. Such was the irritability of her stomach that it rejected every kind of nourishment, and in consequence her state of weakness and prostration was so great that she seemed to be dying of inanition. Dr. Physick, after proposing a variety of articles, inquired of her, whether, since she was first attacked, she had ever tried milk. On her replying that she had often taken it, but her stomach always rejected it, he asked her if she did not think that her stomach would retain the half of a tumblerful of milk? She answered in the negative, as she did also when a wineglassful was proposed, and again when a tablespoonful was mentioned. "He then told her that he was under the impression that she could retain in her stomach one teaspoonful of milk, and accordingly he prescribed the article for her, to be taken in that quantity at repeated intervals. The lady adopted his views, attended to his prescriptions, and was ultimately restored to perfect health." In another case, of a lady who insisted on her inability to take opium with a view of procuring sleep, as it never produced that effect, although repeated trials had been made by its administration of an evening, Dr. Physick advised the physician, with whom he was called in consultation, to give the medicine at other hours, and with its taste covered as much as possible by other substances. In this manner the association in the mind of the patient between the taking of the opiate and a belief in its inefficacy would be broken. It was accordingly

administered at intervals through the day, combined with mucilage and nitric acid, as if to meet other indications, but really with a view of placing the patient under its hypnotic influence by the time that night was reached. The result corresponded with the anticipations formed, and the lady obtained sound and refreshing sleep, and ceased ever after to dispute the soothing effects of opium in her own case. Most commonly the opiate prescribed in the evening is taken at too late an hour, and hence its full hypnotic effects are not experienced until the approach of morning, or even of the hour for breakfast.

If Dr. Physick can be supposed to have followed out systematically a plan, it was in the numerous cases of chronic disease, many of them coming from a distance, which depended on chronic inflammation, induced, too often, by excess in living and the operation of climatic causes. Patients thus affected were generally subjected to a reducing treatment, the prominent points of which consisted in bloodletting, general or local, or both, purging and low diet, which last, by the multitude, is always called starvation. His design seemed to be to treat an inflamed internal organ or viscus as he would an inflamed eye, or an inflamed joint, by removing, and withholding as much as possible, all causes of excitement, and allowing it to rest or to make a near approach to this state. The authority imparted by his great reputation and experience, procured for him a deference to this course of treatment, and more patience and persistence in it than would have been yielded to other professional men; and hence more instances could be recorded of his success than would have fallen to their lot, supposing even that they had been influenced by the same pathological views. It must be acknowledged, however, that instances were every now and then adduced of his pushing these measures to an extreme, or, rather, of continuing them needlessly long. It is possible that undue stress, if not exaggeration, would be displayed in popular comments and glosses on these cases, owing to the treatment being so adverse to the prejudices of the many, who can never divest themselves of the vulgar notions that the sole treatment of a disease ought to consist in keeping up the strength

by feeding and stimulating, as if digestion and assimilation could be carried on at this time as they are during health. This idea is just as rational as would be that of recommending a man to keep up the strength of an inflamed eye by the free admission of light, and by continuing to use the organ, or to give suppleness to an inflamed knee-joint by walking and waltzing.

In a more advanced stage of disease, and the inflammatory element absent or failing to yield to a reducing treatment, Dr. Physick's views and prescriptions exhibited nothing remarkable or requiring distinct record. His practice was such as we have already described. If he did not himself generalize from exceptional cases, his advice in these was sometimes assumed to be his regular treatment of the disease, and his name was made the cover or pretext for pure empiricism. It is most probable that a remedy used by him in the last resort, after he had exhausted the *Materia Medica*, was had recourse to in an early period by those who were either ignorant of the list or too impatient to make the selections from it which were sanctioned by previously recorded experience. Among these exceptional modes of treatment, generalized by the multitude to a mischievous excess, was the decoction of soot and wood ashes, which Dr. Physick was said to have found beneficial in dyspepsia in his own case, and hard cider, used by him in obstinate cases of dyspepsia with heartburn.

If we have spoken of Dr. Physick's practice as one of enlightened empiricism, we must be understood to use this word in its large philosophical sense, that in which it is recognized in the history of medicine. Far different is it from the popular empiricism or quackery, which does not set up a claim for a particular mode of treatment, or a particular remedy in a specified disease and stage of that disease, but impudently asserts the all-healing and curative power of one article or combination of articles in all diseases, however opposite they may be in their origin, organic seat, and other essential characters. No physician was more decidedly opposed to this impudent and ignorant assumption of the miraculous powers implied in such pretensions, than the eminent man whose professional character we are

portraying. On a memorable and ever regrettable occasion, when some of his colleagues in the University, and the President of the College of Physicians, so far forgot the proprieties of medical ethics, and the conclusions of medical logic, as to give certificates in favor of a quack medicine, Dr. Physick steadily declined to join in what, in the mildest terms, must be called an exhibition of foolish good nature to a begging empiric, at the expense of the health of the community.

We can scarcely speak of Dr. Physick as an author, so few and brief have been the papers from his pen which have appeared in print; and it must be regarded as somewhat singular for one of his eminence, who had been a public teacher so long, and who was so largely engaged in the practice of medicine, that he has not written a single article on the treatment of a disease, separate from its surgical bearings and the surgical means used for its relief. His accumulated experience is, therefore, in a great measure, lost to the world; and in this loss follows a gradual decay, as year succeeds year, of his own great reputation, which requires something more than tradition and historical eulogy to keep it fresh in the mind of posterity. We have good reason for believing "that in the latter years of his life he regretted very much he had not published more for the benefit of his fellow-beings; but at this period his disinclination and habits had become so confirmed that it was impossible for him to change them." Another example to enforce the old moral of the danger of procrastination.

A tolerably fair knowledge of the most important of Dr. Physick's improvements in surgery may be obtained by a perusal of Dr. Dorsey's "Elements," in which the reader is continually reminded of the oracle whose revelations are law to the author. A little more of the expansive liberality of feeling which allowed Dorsey to disseminate many of the views and modes of practice of Dr. Physick, would have led the latter in after years, and in the latter part of his life, to have brought out, in a collected form, his published papers, his lectures on surgery, and selections of cases recorded in his note-book. Not only, however, did he fail to do this, or to authorize some person to per-

form the task after his death, but he made "an ardent request," which, by the parties to whom it was addressed, would naturally enough be construed into a positive prohibition against the publication of his manuscripts.

In bringing to a close this imperfect retrospect of the life of him who has been appropriately called the "Father of American Surgery"—a title won not less by his wise precepts than successful example, and whose eminence for many years as a practitioner of medicine was undisputed—his present biographer may be allowed to say, that he felt himself the more free, on account of these great merits of Dr. Physick, to break the monotony of continued and indiscriminate praise, so much the fashion among us in biographical compositions, by occasional commentary, sometimes bordering on criticism, when such freedom seemed to be called for in illustration and enforcement of questions of moment to the profession at large, whether coming up directly or collaterally in the course of the narrative. In describing character, as in painting portraits, there is no such thing as a likeness purely chromatic. This can only be obtained by the blending of colors and a due proportion of shading, if the author or the artist would be true to nature.

Although, in the performance of his task, the practised talent for delineation may be wanting, the biographer can lay claim, without fear of dispute, to the other not less important requisite,—honesty of purpose.

JOHN BELL.

PP 351-459

JOHN EBERLE.

1788—1888.

It is not a very pleasant task to prepare a biography of an individual who has held a position to honor and eminence, unfurnished with accurate data in respect to the salient points of his history. To precisely such an embarrassed effort, the attention of the writer has been directed, and in the absence of anything like reliable facts derived from others, he ventures to discharge the duty assigned, by making the necessary drafts from the storehouse of his own memory.

John Eberle was born in Lancaster County in the State of Pennsylvania, in January, 1788; and was, at the time of his decease, which occurred in February, 1888, a few weeks over fifty years of age. The fact of his actual age is associated with another, that was developed in his last illness, viz., a dread of dying on his birthday, when a half century would have been completed. It is needful to refer to these circumstances; because it was very generally believed by those who saw the subject of this memoir, occasionally, during the last year of his life, that he was at least sixty or even sixty-five years of age.

Touching the parentage of Dr. Eberle, we know little more than that his father and mother were among the early foreign population of the decidedly German county of Lancaster. We do not regard ourselves as among the ancients of the State, as yet, but can well remember when the seats in the legislative hall were occupied, to a considerable extent, by stalwart men who could not present a petition in the English language, simply because they were not familiar with it. And, to go no

further back than our earliest acquaintance with Eberle, it is proper to say, that the first interview gave abundant reason for the opinion, held for some years, that he was really a German by birth. Such was the prominence of the foreign idiom and pronunciation of certain words, that no other conclusion seemed to be warranted. Even to the year of his death, it was impossible to mistake the fact of his origin, by the peculiarity of his enunciation of phrases and monosyllables that are yet fresh in our recollection.

As the county of Lancaster, outside the city, was settled by agriculturists, who gave to the region so prominent a character for the best practicable, and most productive culture, we have no doubt that the parents of Eberle were among the pristine cultivators of that rich soil, and that the son's early years were devoted to the vigorous and healthful exercise of the plough. Then, too, there were very few opportunities for the acquisition of even a good school education, to say nothing of regular classical training; so that it must have been a laborious task to attain anything like the position of a scholar, apart from travelling to a distant place, which few had the ability then to provide for. In whose village school or academy Eberle was educated, we know not. That he did not enjoy the advantages of a collegiate course, is very certain; and from all the hints ever thrown out, in relation to this point, we incline to the belief that he was chiefly the arbiter of his own destiny, so far as mere human effort is concerned; in other and more familiar language, we may safely affirm that he was a self-made man. ✓

The mere circumstance of devoting their son to the profession of medicine is, of itself, evidence that the family had the means of comfortable living, albeit they never became wealthy. For, at the time of the medical pupilage of the son, in Philadelphia, the cost of tickets, alone, was not less than one hundred and fifteen dollars per session, exclusive of boarding and incidentals. Each professor's ticket cost twenty dollars; and there were then no credit cases, nor dead heads, nor beneficiaries. Even three years later, when I began to attend the lectures of

the University of Pennsylvania, I never heard of an application for credit; and perhaps the honor of the profession would have been the more signal, to-day, if the practice had never been entertained here or elsewhere.

The private preceptor of Eberle is unknown to us; yet, as no one then ventured, as is now too common, to study medicine with no guide, we take it for granted that he enjoyed the instruction of the best man the neighborhood could furnish. We think, too, that three courses of lectures were attended, prior to offering for graduation, for that was by no means unusual in the days of Rush, who was a strenuous advocate for what he styled "a three-course study." Be that as it may, it is certain that the name of our late colleague was enrolled in the list of graduates in the University of Pennsylvania, for 1809; his thesis for the occasion, being devoted to an investigation of *animal life*. He was, therefore, a few months over twenty-one years of age, when the degree of M.D. was conferred upon him.

Like almost all young graduates in our profession, young Eberle, no doubt, fancied that to obtain a diploma, was to be a veritable, money-making doctor *de facto*, and that he had certainly passed the Rubicon. To be sure, he went to work like others in similar circumstances, scarcely dreaming that he had an up-hill task in advance, that might test his firmness and perseverance not a little. What his actual success amounted to, in the active business of his vocation, we know not, but would venture to put it down at a low figure, did we deem it worth while to conjecture at all. Suffice it to say that the dull round of laborious and unproductive toil, "up hill and down dale," just to feel pulses, did not then exactly suit the proclivity of the young doctor's mind; and hence the fact, that he became editor, and perhaps the proprietor of a political paper, with special reference to a gubernatorial election, that greatly excited the people just at that time. This new relation involved our candidate for political fame in associations by no means calculated to elevate moral character, or even to retain it in *statu quo*. To be an editor, then, at such a crisis, was to

be identified with all sorts of office-hunters and unprincipled demagogues, and run into all their excesses. Hence, it turned out, in a very brief space of time, that Eberle, not only lost all his practice as a physician, but was led off into other kinds of practice that threatened for a season to involve him in utter ruin. We have often wondered how such a complete revolution could have occurred in his history. For he was, not only since my acquaintance with him, but long anterior to that date, a man of reserve and retirement, evidently not most pleased in the bustle of society; but preferring association with a few friends, and that only now and then. Nature evidently cast him in a student's mould, and it was his delight, so far as that emotion was cherished by him, to be snugly hid in his own office, where, free from all interruption, he might pursue the even tenor of his way. Knowing this to have been a marked feature in his history in subsequent years, I never could comprehend fully the motive to entice him into the noisy bustle of an editor's office.

It is not needful here to enter into details, since their development at this day could not subserve any good end. Suffice it to say that, roused by some true friends, or awakened by his own reflections to a sense of his imminent danger, he resolved to abandon the county of his birth, and to eschew a political life altogether. This was wise; for, most assuredly, he never perpetrated so great an error as that which drew him from the rounds of professional drudgery into the demagogue life of a thorough-going political editor. But where should he retire to resume professional labors? He had not only lost true friends by his past course, but his purse was sadly deficient; and to locate in a large city, where the expenses of sustaining a family, even at that period, were very considerable, seemed to be a very hazardous undertaking. But necessity bows to no legal code, it is said, and it so happened that our hero found himself, perhaps even to his own surprise, a denizen of the city of brotherly love. He had very few acquaintances there, perhaps none who could or would render him really valuable aid in such a crisis. He was young enough and had physical force sufficient to en-

counter the risks and delays incident to professional effort in a new place. Had he retained as much moral and mental energy, in his escape from political life, as the coming emergencies would require? That was the very question which, of all others, most deeply interested Eberle and his growing family just then. To look for patronage from others of his own vocation was hopeless, or nearly so, and he soon realized that if his bark went up stream at all, he must pull the oars, pull hard, and pull constantly.

My first professional acquaintance with Dr. Eberle was in the summer of 1819, when I resided at Norristown, Pennsylvania, and he on Race Street, between Eighth and Ninth. He saw a patient, who had been for some time under my care, affected with diabetes mellitus, and who being on a visit to the city, met the Doctor casually and stated his case. This led to a consultation, and laid the foundation of my favorable opinion of him as a practitioner. We conversed about some papers of mine that had appeared in the "New York Medical Repository," then the only prominent medical journal in this country, and also touching some of his that had found a place in another periodical, and thus our literary and professional intercourse had its starting point. He expressed regret frequently that Philadelphia had no journal of its own, for, at the period referred to, the "Medical and Physical Journal" of Barton had passed to the tomb of the Capulets, and the "Medical Museum" of Coxe went the way of all flesh. Besides these, there had been two or three ephemeral efforts to get up and maintain a periodical suited to the wants of the profession. This desire on the part of Eberle was the more laudable, since the University of Pennsylvania, located in Philadelphia, and then the medical school of the country, was in itself a reason why an able journal ought to be sustained on the spot. It is hardly necessary to say that, as a consequence of reflections such as these, the "American Medical Recorder" made its debut, under the editorship of John Eberle, M.D., as a quarterly, and was ably sustained by men who were willing to write without pecuniary reward, and some of whom perhaps owe their after elevation to the efforts of their pen at

that time. The first number appeared in the year 1818, and the popularity of the work constantly increased under the auspices of its projector. Many of the most valuable papers ever published in this country are to be found on its pages, and to this day are subjects of reference.

It may be proper here to say that not one of the prominent publishers in the city could be induced to undertake the issue of the "Recorder," even without offering a cent of compensation to the editor. At length the late James Webster, who subsequently became a pretty extensive book publisher, embarked in the enterprise. And, notwithstanding the fact that for years the "Recorder" was the only standard medical journal among us, Dr. Eberle repeatedly assured me that never did its clear avails enable the publisher to pay him five hundred dollars for one year's toil as editor. But for such a man as Webster in the management of the financial concerns, the editor would never have realized a dollar for his services. He made annual tours over the United States, calling on delinquent subscribers for payment of arrearages, and soliciting new names, not by proxy, as is now done, but in person. He narrated to me the particulars of one of his interviews with a subscriber who was indebted for four or five years' subscription, which are so full of interest to all publishers and editors of medical journals, that I venture to introduce the story here. The scene was located in Virginia, and the subscriber was a highly respectable Virginia physician, and possibly there are many now in all the States of the Union in pretty much the same position. After a very polite reception, the Doctor began to find fault with the "Recorder." "It has fallen off sadly," said he, "and I think I will cease to take it; you ought to have been paid, however, long ago, but the thing passed from my memory." "Well," said Webster, "I should like to know the particular numbers to which you refer, for we respect the judgment of our patrons, and are glad to take a hint when it may profit all concerned. Please let me see the objectionable articles." The Doctor mounted a table to reach the lot of numbers piled on the upper shelf of a case, handing them down one by one with rather a bad grace, as the

publisher thought. What must have been his surprise, we may conjecture only, to find that in scarcely an instance had the leaves been cut so as to permit a perusal. It is hardly needful to add that the subscriber exhibited tokens of mortification which words could not describe, and that he not only paid his dues, but continued his subscription to the periodical.

It was quite soon after the first appearance of the "Recorder" that "Eberle's Therapeutics" came before the public. I need not pause to praise that production, since it was conceded to be, not only in this country, but in distant lands, the very best work on the subject ever issued from the American press. As evidence of the high estimate placed upon it, the work was translated into several foreign languages, and has been quoted with marked approbation ever since. In truth, no American work on therapeutics has ever yet been published so full of originality and real excellence. If memory is not at fault, the first edition appeared in 1822, and was executed in the very best style known to publishers at that period. And yet, with all its merits, it was not possible to find a man or a house willing to embark in the publication, save Webster, who, with very small means at command, actually offered the author the monstrous sum of two hundred and fifty dollars for the two volumes! But did he accept the proffered compensation? Most assuredly, for the plain reason that he greatly needed the money and could get not a dollar more. And it is very questionable, in view of opposition from a potent quarter which the author had to encounter, whether the publisher realized any revenue from the sale of the work. On this point, however, I am entirely ignorant. I do know certainly that efforts were put forth to render the work unpopular, nor am I sure that they did not mar the sale to some extent. We shall have occasion to notice other publications from the same pen, but feel bound to record our opinion here, that the work on therapeutics was decidedly the ablest production that bears the name of John Eberle on its title page.

Anterior to the publication of the work just noticed, Dr. Eberle had been a pretty regular attendant at the meetings of the

Philadelphia Medical Society, in the business of which he took an active part. To those who have come on the stage of professional life since the palmy days when the Medical Society flourished, it may be proper to say, that the sessions of the Society were held in the same season with those of the medical department of the University of Pennsylvania, then the only school of medicine in Philadelphia. On Saturday, at half-past seven P.M., the hall of the Society, which for several years was in the basement of the Masonic edifice on Chestnut Street, began to receive the usual visitors. These were made up of such men as Dorsey, Parrish, Chapman, Eberle, Colhoun, Cleaver, Rousseau, McClellan, Jackson, Hodge, Rhees, Mitchell, Bell, Hartshorne, together with a crowd of medical students, anxious to hear the discussions of important questions in theoretical and practical medicine. Near the close of each winter, a committee, selected for the purpose, reported a list of lecturers for the weekly meetings of the next session, with the topics of lecture annexed. This list was published in the medical journal of the city, so that all who desired to know who would probably lecture on a certain night, might easily gain the information. So also, at the close of each meeting, the name of the next lecturer and his theme were announced by the secretary, in addition to which a notice of like import was placed in a conspicuous spot in the University edifice.

Those whose memory is sufficiently retentive, and who were often present on such occasions, will recollect that Dr. Eberle was not an unfrequent participator in the debates; and while it is conceded that he was neither a finished orator, nor what is usually understood by the term "eloquent," yet he spoke to the point, intelligibly and sometimes with great force. On one occasion, he had an opponent, who shall be nameless, who was very fond of quoting the works of old authors quite profusely, without, however, making a reference to chapter or page. The gentleman referred to, on one occasion, indulged in this proclivity to a larger extent than usual, and seemed to carry the audience with him, by what sounded like unanswerable argument. It so happened that Eberle, who was vastly more of a

book-worm than his opponent, had read every author named in the discussion; and in reply, he complimented the last speaker for his apparent familiarity with the ancient writers on medicine. "The authors quoted, or named, rather," said he, "have indeed proved themselves to be true medical philosophers; but it so happens that not one of them wrote on the special theme which my opponent has been professedly discussing. There is not an attempt made by any of them to argue the question now before us; and I pledge my veracity for this statement." Such were substantially the remarks then made; and in an instant the tables were turned, and the laurels were obviously won by Eberle.

We cannot but regret the circumstances—and really we do not know precisely what they were, as we then resided in Kentucky,—which operated to terminate the existence of the Philadelphia Medical Society. More than once during our residence in Frankford, five miles north of the city, we thought it worth while to attend the weekly gathering, to listen to the earnest and instructive debates, and sometimes to take a share in the proceedings. There never was an expedient in operation in the city, and probably there never will be, from which the students in attendance on medical lectures derived more instruction; and for this reason, if there were no other, we have ever regretted that the Society has been abandoned.

As it could not subserve the cause of truth or science to disguise the fact, that during a portion of the period that has passed in review, there were two professional parties in the city, each vigorously contending for the mastery, so we will not attempt to conceal it. The effort to do so would be vain and futile. There was but one medical school; yet such were the feelings engendered from various causes, which need not be named, that a determination was deliberately formed, as early as 1822, that Philadelphia should have a second school of medicine; and this purpose had its rise with men who were educated in the parent school. Intimately related to this scheme were the regular courses of lectures given by Drs. Eberle and George McClellan, in the old Apollodorian gallery of Mr. Rem-

brandt Peale, in the rear of his residence on Walnut Street, opposite Washington Square. Those lectures were well attended; and the lecturing powers of the persons named were thus made familiar to the profession. Often had I conversed freely with Eberle and McClellan, in the city, in respect of the contemplated school; and they understood me perfectly in the premises. Unexpectedly, both paid me a visit, at my residence in Frankford, avowedly to press me more closely to the advocacy of the cause. The daily papers had already opened a pretty fierce discussion of the merits of the case; and it was desired by both the individuals named that my pen should come to their aid. This service was rendered with all the energy that I was able to carry into the contest, and like the productions of the opposite party, under a fictitious signature. It is needless to conceal the fact that all this zeal in the incipency of the enterprise was, more or less, prompted by an expectation of being a component part of the faculty at the outset. Nothing less than this, as part of the scheme of the gentlemen, could have been inferred from our interviews; and yet it is a matter of history that, in this respect at least, it was my lot to be disappointed. And when I call to mind the jars and contentions, the hard speeches and lawsuits that marred the prospects of the school for years after its organization, I feel quite satisfied that my connection was providentially deferred to a more convenient season.

As will always be the case, diverse views were advocated in respect of the contemplated new school, especially touching its cognomen, location, and the corporate powers under which it should be conducted. As the ball was rolled on, it increased in magnitude and importance, and many influential friends gave in their adhesion to its interests. The press teemed with essays pro and con, while the legislature was invoked, by all the considerations that party zeal could adduce, to interfere so as to defeat the purpose of the adventurous aspirants who dared to call in question the vested rights of a century. But the labor was in vain. The spirit and genius of democratic institutions was triumphant; and under the wing of

the literary establishment at Canonsburg, known as Jefferson College, the school No. 2 of our great city, found a local habitation and a name; and so long as the Jefferson Medical College of Philadelphia shall exist, will the name of John Eberle be identified with its rise, and also, to some extent, with its progress. Within its walls he taught *materia medica*, and also the theory and practice of medicine, and both with marked ability.

It was during the period of his connection with the Jefferson Medical College that Dr. Eberle issued his well-known work on the Theory and Practice of Medicine, for which, as his fame was well established, he received a more liberal compensation than his Therapeutics yielded, although, as we have already said, the last was his best work. It was the only Philadelphia issue on practical medicine, in two octavo volumes, that had ever appeared, professing to be original to a great extent, and not a mere reprint of a foreign work, with the addition of a few brief notes. Hence the demand for it was very extensive, so that it reached the fifth edition prior to his decease, and found a place in almost all the respectable libraries of the profession, in all sections of the country. Like his Therapeutics, this larger work became a text-book in various colleges, and had his life been prolonged, it would probably have been much enlarged, and in keeping with the progress of the science.

In close connection with the work on the Practice of Medicine, appeared a small volume intended as a kind of *vade-mecum* for the student, and known by the title of "Eberle's Notes." It was a duodecimo, containing the skeleton of his course on theory and practice. It had a fair sale in this city, and was so much sought for in the West, in 1832, as to require the issue of a new edition.

It so happened, owing to many causes which it would not be proper to detail here, if we were able to do so, that the success of the new school was not equal to the anticipations of its founders, and especially did it disappoint the subject of this memoir. How much aid its annual revenue contributed to the support of his family we know not; yet a conjecture, not far

from reality, might be made, from the fact that, as a sort of last effort to swell the number of matriculates, a Western teacher was engaged to give a course of lectures on theory and practice, in the session of 1880-1, for the sum of one thousand dollars. It is to be presumed that the existing faculty made the maximum offer of compensation in this instance, and even exceeded the actual resources of the school. It was an experiment. The fame of the teacher, so engaged, was a basis on which it was fondly hoped the reputation of the College would not only rest securely, but in virtue of which the seats would be filled to a larger extent than at any previous period. But the result was sheer disappointment, although the number of pupils was somewhat augmented.

"Hope deferred," it is well said, "makes the heart sick;" and Dr. Eberle, chagrined at the lack of good fortune in his favorite enterprise, was ready for any reasonable proposition whose tendency might be to improve his pecuniary condition. His family expenses had been considerably increased by the education of his sons at Jefferson College, in Canonsburg, and by other outlays, incidental and unavoidable, and he was actually in debt at the period now passing in review. He was therefore quite willing to hear anything like a hopeful proposition for a change. Early in the session already named (1880-81), the scheme of a new medical school in Cincinnati was laid before him, decorated with all the tinsel and ornament that the highwrought imagination of a very sanguine individual could append, and Eberle took hold of it at once. The writer of this article speaks advisedly on the subject, for he was just as readily operated on in the matter referred to, as were others. The issue was, that John Eberle and George McClellan,* of Jefferson Medical College, and Thomas D. Mitchell, then of Frankford, Pennsylvania, were induced to accept chairs in the medical department of Miami University, purposely intended as a rival, if not the annihilator of the Medical College of Ohio. This was consummated in December, 1880,

* This gentleman finally decided not to go to Cincinnati.

Dr. Drake being then a temporary teacher in Jefferson, and Dean of the Faculty of the projected Ohio school.

In the fall of 1831, Eberle reached Cincinnati and entered on the duties of his chair, not, however, in the school first named, for it so happened that an amalgamation of schools took place, and the professors selected in Philadelphia found themselves in the old Cincinnati school, the Medical College of Ohio. As a rival, we were positively assured that our matriculating list would be at least two hundred; but here, too, was disappointment, for, even under the far more promising arrangement effected by union of the schools, the number of pupils, all told, was one hundred and fifty, the pay class scarcely exceeding one hundred and thirty. This deficit in expectation, raised but a few months before, soured the mind of Eberle not a little, and had a most unhappy effect on his deportment and general habits, from which he never after recovered. Truthfulness requires a bare reference to this matter, but details are not necessary, and so we pass the subject.

It was during the new collegiate relation that the work on the Diseases of Children went to the press. The enterprising publishers, Corey & Fairbank, had just issued my "Elements of Chemical Philosophy," and, although it was their first effort in that line of publications, the execution was so satisfactory, and the sale so liberal, as to prepare the way for the work of Eberle alluded to. For this, however, he received very little better compensation than that derived from his "Therapeutics." But the publication was an experiment, in which no book house had previously engaged in that city. The work was stereotyped, and had as good a sale as could have been anticipated, all the circumstances considered; for, anterior to the issue of either of the books named above, the work of disorganization had been commenced in the College, and the influence of party spirit could not be favorable to their sale, even if it did not diminish it. As a necessary consequence of the movements against the school, its classes waned sadly, and Eberle was doomed again to vexation of spirit, with the concomitants that too often follow in its wake.

During our connection with the Medical College of Ohio, the "Western Medical Gazette" was projected, the editors being Eberle, Staughton, and Mitchell. This periodical was sustained, as to its literary feature, almost exclusively by the pens of the editors, and reference to its pages will show how largely the subject of this memoir contributed to give it popularity and value. His articles on Diagnosis were especially prized, and no doubt caused numerous additions to the subscription list. So, also, in the Ohio Medical Lyceum, founded at the same period, Eberle put forth his best energies, in papers read and discussed, thus offering additional inducements to the medical pupil.

But the mutations of medical schools had not yet ceased. Not only did the Medical College of Ohio rock to its centre, so that its walls shook even to the foundation, but its rival, the school of Lexington, Kentucky, now trembled under the ruthless hand of revolution. A portion of its faculty sought a more quiet home in Louisville, to found an institution, for the very purpose of blasting the hopes of the remaining props and friends of Transylvania. To insure the greatest amount of success, they detached from the Ohio school its Professor of Anatomy, who enjoyed a fair reputation in that department, electing, at the same time, the writer of this paper to the chair of Chemistry, and urging his acceptance of the same with great zeal. Just at this juncture, the individual last alluded to was chosen to the professorship of Chemistry in the school of Lexington, and after the lapse of a week, the chair of Theory and Practice was filled by the appointment of Dr. Eberle, with a guarantee of four thousand dollars per annum for three years. It is needless, perhaps, to say that he accepted the new post, and so vacated his place in the Medical College of Ohio.

A stranger would be very apt to conclude that, however disastrous and unsatisfactory had been his anterior connections, Dr. Eberle was now in the very position to meet all his reasonable wishes, and to render his family comfortable and happy. The annual stipend was regarded as ample, considered especially in connection with the low prices of all articles of

living, at the time, the cheapness of house rent, &c. Then, too, the anticipations for the school itself were encouraging. The Medical College of Ohio was broken to fragments, and a new school was operating, in the same city, against it. The Institute of Louisville, formed by the professors ejected from Transylvania, was a sheer experiment, whose success was, to say the least, quite doubtful in the judgment of many. And despite of all its array of means, possessed and in prospect, the class of Transylvania for 1837-8, the year of Eberle's induction, numbered not over twenty less than the roll of the previous session. These were encouraging features beyond cavil.

But, alas for our colleague! his recent vexations and forebodings had crushed his spirit so completely, that, aware as I had been for many months of his actual condition, I could scarcely hope against hope, that he would be adequate to the duties of his new position. The faculty announcement, too, had spoken out so fully in praise of the professor elect of theory and practice, that unusual expectations were raised in the minds of those who had only heard the name of Eberle. His task was thus, negatively at least, not a little augmented; and he had to meet it, if at all, with waning powers. The more enthusiastic, whose acquaintance had just been made, could think only of great accession of strength by this appointment. The debility and manifest lack of vigor seemed to be, in their eyes, a merely transient affair that a few weeks would efface. The change of water and change of place were the causes, in their judgment, of the difficulties that presented.

It so happened that my first interview with Dr. Eberle, subsequent to his election, was at the regular faculty meeting held shortly after his removal to Lexington, and the change in his whole aspect alarmed me. It seemed impossible that he should be able to go through the duties of the session. Now and then, however, he appeared to rally under new excitement, and his consent was obtained to be one of the editors of the "Transylvania Medical Journal;" for whose pages, however, he was never able, if my memory be not at fault, to furnish a contribution.

The expectation raised by the announcement of his introductory for the next day was so great, that the large chapel of the University was densely filled long ere Eberle made his appearance. He was more than usually feeble on that day, and had made no special preparation for the occasion. When he rose to the stand, there was an evident feeling in the auditory as though they regretted that he had not been excused. But he was a new teacher, of whose fame much had been said in private and in public; he was under a large guarantee, moreover, to render his services the more available for the school, and hence the difficulties in the way of excusing him from this duty. There the audience is composed, to a large extent, of the ladies and gentlemen of the city and vicinity, professional men and those of refinement in retired life, all eager to listen to the annual introductions of the medical school. To have left a blank on that day in the order of introductions, would have been to proclaim a kind of failure, whose operation might be disastrous. This our colleague well knew, and therefore he put his hand to the plough with all his might. The spirit was willing, but the flesh was weak. Hence the pages of his manuscript were rolled over faster than he could read them, and in twenty-five minutes the discourse was abruptly terminated.

I am not aware that the assembled class expressed any lack of confidence in the powers of the new teacher to complete his task simply from the failure of his introductory. Yet they had misgivings which could not be suppressed, mingled with ardent desires to hear his entire course of lectures. His infirmities, in place of yielding to the means resorted to, obviously acquired a deeper hold on his system. He was compelled to enter the lecture hall, after the clock had issued its summons, and from the same cause, to close in less than half an hour. For his special convenience, the meetings of faculty were held at his residence, but he could not be present. The symptoms of his case became more and more aggravated; and about the middle of January two of his colleagues were requested to fill his chair as well as they could. On the second day of February, 1838, his protracted sufferings terminated in death, an event which,

although regarded as not very distant, came at last rather unexpectedly.

The funeral obsequies of the deceased professor were solemn and impressive. A large concourse, composed chiefly of the medical class and citizens, followed the remains to their place of temporary repose. Subsequently, they were transferred to the Episcopal Cemetery in Cincinnati, where a monument marks their final resting-spot. By a vote of the faculty, one of its number was requested to pronounce a discourse on the character of the departed colleague, prior to the termination of the session; and that task was performed by the Professor of Institutes and Medical Jurisprudence.

It is with real sorrow the announcement is made touching the family of the deceased professor, whose history has been imperfectly sketched, that he bequeathed to them nothing more than his professional reputation. Always a bad financier, as infirmities clustered around his path, he grew more and more careless of his pecuniary interests. One of his sons graduated in the Medical College of Ohio, and another for awhile appeared to do an excellent business in Cincinnati as an apothecary. Both went to premature graves ere they attained the age of thirty-five. Another son graduated at Lexington, in March, 1838, and is located in some remote spot in the West. The widow is still living.

The reader of this imperfect sketch will doubtless expect an opinion at least touching the qualities and powers of Dr. Eberle as a public teacher, debater, writer, and practitioner. From what has been said already the views of the writer might be easily inferred, yet it may be proper to say a few words on these points.

As a public teacher, no one could venture to affirm that our colleague was very interesting, exceedingly sprightly, nor even tolerably eloquent. In his palmy days he knew how to interest a class by throwing his whole soul into the subject. He had an important advantage over some teachers in this respect; he always made the hearer feel that he understood his subject in all its bearings. He was anything but a good reader, but could

happily blend reading with extemporizing when he was in the right mood. To this course he resorted sometimes from necessity.

I called to see him once on professional business an hour before the time of his regular lecture. His manuscript was before him, and he appeared to be in a brown study. Said he, "I was up all night and got home but a few minutes ago, and here are just seven pages for an hour's lecture." "Well, how will you manage," said I, "to fill your hour?" To which he replied, "I have a bad cold, and shall be obliged to cough and use my handkerchief frequently, and to swallow a mouthful of water as often as I can. With these expedients, joined to the use of as much loose talk as I can command, I shall be able to eke out the hour with seven pages. I have done it before, and can do it again."

As a debater, he was just what I have elsewhere intimated when speaking of the Philadelphia Medical Society. His accurate knowledge of authorities fully compensated for the deficiencies of utterance and expression, which would otherwise have rendered his efforts less effective.

Touching his qualities as writer and practitioner, my opinion has been abundantly expressed already, and to say more would be superfluous.

As a man, one of his most prominent defects was a lack of decision. Hence it occurred, no doubt, that he was severely censured for the erratic course of the Jefferson College in its early history, when, in fact, the difficulty had its rise in the facility with which others could operate upon him to accomplish their purposes. I am the more disposed to this view of the case from a full personal knowledge of his demeanor in the troubles of the Medical College of Ohio from 1831 to 1835. It was impossible to approbate his course at that trying crisis, yet it was palpable that he was less, by far, of an original actor in the scenes than a passive subject to be moulded by designing individuals. Herein consisted his grand defect, as one invested with administrative powers, and whose professional position might have influenced others, under different circumstances, to have pursued a better course. The defect alluded

to, rather than any fixed purpose to do wrong to others, was the basis of a large portion of the censure which was so freely dispensed to our departed colleague.

Faithless would we be to truth and the welfare of the young men of the medical profession, did we keep utter silence touching a failing of Eberle, that overshadowed his whole history, and brought him to a premature grave. For more than ten years anterior to his immigration to Ohio, he had acquired the deleterious habit of opium-eating. In moments of calm reflection he saw his danger, and made a sort of effort to extricate himself from the sad dilemma in which habit had involved him. But his resolutions were mere ropes of sand, that held him to his purpose of reform a few days or weeks at most. From one stimulant and narcotic he flew for relief to another, till finally, his entire nervous system was crushed irrecoverably, and he died, an old man, in the meridian of life. It was our purpose to have suppressed this sad item of the history of one, who, but for the error to which we have referred, might have filled a much more conspicuous niche than has been allotted to him. But it seemed to us as though our task would not be discharged, if we kept the youthful aspirant for professional fame in ignorance of the sad mistake by which the subject of this memoir cast a sombre hue across the pathway of life, despoiling the fairest prospects, not only in respect of himself, but of all who were dear to him. The glorious orb of day, has here and there a spot to blur the splendor of his effulgence, and hence we need not wonder that our old colleague did not exhibit a perfect character.

Having sufficient knowledge of all that remains of the family of Dr. Eberle to assure me that no information could be obtained from that source, on which to construct anything like a biographical outline, it remained for me to give a negative to the respectful request that I would furnish a memoir, or to attempt the execution of the task with such helps as my own reminiscences might suggest. This task has been discharged with a strict regard to what I believe to be the truth of history.

THOMAS D. MITCHELL.

WILLIAM JAMES MACNEVEN.

1763-1841.

WILLIAM JAMES MACNEVEN, alike distinguished in the political annals of his native country, and in the progress of science in the United States, the country of his adoption, was born at Ballynahowne, county of Galway, Ireland, on the 21st of March, 1763. His ancestors were respectable country gentlemen, residing on their own estate, which was transmitted in a direct line, from father to son. They owned originally large possessions in the north of Ireland, but were deprived of them in the time of Cromwell, and, with many of their countrymen, were allotted land in the wilds of Connaught. This property, we are informed, remained in the family until the emigration of the subject of this memoir to America.

William James was the eldest of four sons. Of his brothers, the youngest, Hugh, was the only one who lived to reach manhood; the other two, Joseph and Anthony, died in infancy. At the age of ten or twelve years, the subject of this memoir was sent for by his uncle, Baron Macneven, to receive his education in Germany, a custom very general in Catholic families, and rendered necessary at that time by the operation of penal laws. Young Macneven received an excellent classical education at the college at Prague; subsequently he passed through the medical college, and took the degree of Doctor in Physic at Vienna, in 1784. He seems to have been a favorite pupil of the learned Professor Pestel. The same year he returned to Dublin, and entered upon the practice of his profession.

With youth, health, superior abilities, and education in his favor, and good family connections, he had a fair and prosperous career opened to him, and had Ireland been in a happier condition, or could selfish motives have deadened his love of his unfortunate country, eminence in his professional vocation must have been secured. His political associations, however, were of a character which he considered vital to the interests of his country; but, though much absorbed in matters of a public nature, he nevertheless continued the practice of his profession, and mingled in society as usual. The flattering prospect of renown in his medical vocation, and the pleasurable devotion to science, were destined to receive a check by the stormy career that was before him, and the future destinies of his life to be essentially modified by events of national influence on his country. It little becomes this work to dwell with minuteness on the scenes now about to transpire in revolutionary Ireland. They are recorded with fidelity in the ample pages of Dr. Madden, in his second series of the *Lives of the United Irishmen*, and in the beautiful letter written by the daughter of Dr. Macneven, and published in Dr. Madden's work. To American readers, the career of the Emmets, Macneven, and Sampson, both in their native land and in the country of their adoption, are already recorded in accessible pages, and in Dr. Macneven's narrative, entitled "*Pieces of Irish History*." His intimacy with that ardent youth, Lord Edward Fitzgerald, with Jones, O'Conner, and other individuals of note; his entrance as a member of the Secret Society, in which he was joined by Thomas Addis Emmet; his arrest on the 12th of March, 1798; his confinement in Kilmainham, and subsequent removal to Fort George, are among the foremost occurrences most worthy of detail. The elasticity of his spirits abated not from his long imprisonment, and his love of knowledge gave him a support which lessened the privation and the annoyances of his imprisonment. In books he found society; they were his great resource, and we may employ the language of the poet, Dyer, when speaking of Gilbert Wakefield's incarceration in Dorchester jail, as applicable to the patriotic Macneven:

"He triumphed in his prison house.
His prison house! He had no prison house:
Worth, freedom, wisdom, still can walk at large,
Tho' bolts, and bars, and walls of adamant may intervene."

Among his studies, during his privation of liberty, we find he gave great attention to the writings of Ossian, many of which he translated from the original Gaelic, a language with which he was perfectly familiar. We have the authority of his intelligent daughter to affirm that his studies led him to the belief that Scotland was originally colonized by the Irish. It is said that he contributed to General Vallancey's Gaelic Dictionary. After the arrival of the Emmet family at Fort George, he imparted to them instructions in the French language, and actually compiled for their use a French grammar.

After the liberation of the state prisoners from Fort George, he passed the summer and autumn of 1802 in a pedestrian tour through Switzerland, and wrote an account of his journey, called "A Ramble through Switzerland." At the completion of this tour, he visited his relations in Germany, and ever after maintained a correspondence with them. The following year, 1803, he went to Paris, and at the latter part thereof he entered the French army, as a captain in the Irish Brigade. In justification of this movement, he was led to believe that the French intended the invasion of Ireland, and on enrolling himself in the service of France, he conceived he was only in another way devoting himself to his country, and to that cause which he had elsewhere espoused. He had sought an interview with Bonaparte, and had conferences with Talleyrand. Disappointed in these hopes, he at length resigned his commission. The reader, curious of further information concerning the active career of Dr. Macneven, with his co-patriot Emmet, will consult the volumes on the Rebellion of 1798, published by Dr. Madden. It may be here added that the vicissitudes of his political life made him, like Dr. Cooper, of Carlisle, personally well acquainted with a remarkable body of remarkable men, many of whom are immortalized on the pages of Junius. That

he purchased his knowledge at no small expenditure of time and of suffering, will readily be believed.

New resolutions now animated his bosom. The cause of liberty in his own country had sustained a blow, the effects of which paralyzed further effort. A country where that great principle was the active spring in the transactions of a recent republic occupied his most serious thoughts. He had at least one tried and long-devoted friend there, and thither he proposed to embark. He accordingly set sail from Bordeaux for New York, in June, 1804, and arrived in that metropolis on the afternoon of the 4th of July, in the midst of the rejoicings of the American nation in commemoration of the Declaration of Independence. He lost no time in making known his intentions of becoming an American citizen. He fixed upon New York as his permanent residence, and immediately entered upon the practice of physic. That venerable seat of classical learning, Columbia College, *causa honoris*, conferred on him the degree of Doctor of Medicine. He was strongly countenanced by his early and devoted friend Emmet, and upon the arrival of his co-patriot in Irish affairs, William Sampson, on the 4th of July, 1805, he found another generous supporter to illumine his endeavors. The confidence which this trio of talents and virtue reposed in each other was of the most unbounded kind, nor was that confidence ever interrupted through their long lives for a single day. His countrymen at large soon gathered around him, and Dr. Macneven had now proof sufficient to satisfy his judgment that the chosen scene of his future life was the city of his adoption. In 1810 he was united in wedlock to Mrs. Jane Margaret Tom, an accomplished lady, the widow of Mr. John Tom, merchant, of New York, and daughter of Mr. Samuel Riker, of Newtown, Long Island, a descendant of the early Dutch settlers. By this marriage Dr. Macneven had a family of several sons and daughters, most of whom have died of pulmonary consumption. His own constitution, however, was naturally of an excellent order, and secured to him the enjoyment of almost uninterrupted health until far advanced in years. In March, 1838, he was attacked with an alarming

illness, and lay some days dangerously sick, but the attack at length terminated in a severe fit of the gout. His professional pursuits were now both irksome and injurious to him, and he determined on retiring to the country. In November, 1840, he received a severe injury of the leg, which, together with a shock from a fall, occasioned him a long and painful illness. From this time his strength gradually failed him, and on the 12th day of July, 1841, he breathed his last. "He was," says the elegant biography of his daughter, "a consistent and enlightened Roman Catholic, and his examination of other creeds tended only to confirm him in that persuasion."

Extensive learning, rare attainments, great natural abilities, and long service in the cause of medical philosophy, entitle Dr. Macneven to a prominent place in biographical annals. It was my happiness to be well acquainted for a long series of years with those remarkable men, William Sampson, Thomas Addis Emmet, and William James Macneven. The renown of the first two is well established: the general knowledge, the lively fancy and brilliant wit of Sampson in the social circle and in courts of judicature, the immense intellectual stores, forensic powers and oratory of Emmet, are almost proverbial. The warmest friendship united Dr. Macneven with these, his most intimate friends and countrymen; nor can the closing scenes of their eventful lives ever be erased from my memory, when, as a medical prescriber, associated with Dr. Macneven and others, the last attentions were paid to their physical sufferings and departure. Few final separations were more impressive than those which took from Dr. Macneven these enlightened and distinguished characters.

The powers which had been granted to the Honorable the Regents of the University of the State of New York, after being long dormant, were called into active operation by the charter granted by that body for the establishment of the College of Physicians and Surgeons, in 1807, with the learned Nicholas Romaine as president. Dr. Macneven delivered at their opening session a long course on clinical cases as they

occurred in the New York Almshouse, of which institution, with the late Dr. Hosack, he was an associate physician. In 1808 he received from the Regents the appointment of Professor of Midwifery. In 1810 a reorganization of the School took place, when Samuel Bard was placed at the head. Dr. Macneven was now chosen the Professor of Chemistry, and, in 1816, while Dr. Francis was in Europe, *Materia Medica* was added to his chair. This arrangement continued until 1820, when they were separated, Dr. Mitchill being assigned that duty with Natural History. In 1826 he resigned his professorship in the College of Physicians and Surgeons, and, with his colleagues, who withdrew at the same time from the institution, he received the thanks of the Board of Regents for the faithful and able manner in which they had filled their respective offices as instructors and lecturers in said College. Few public documents on collegiate subjects could prove more gratifying to the feelings of an enlightened body of long-devoted teachers than the elaborate Report on the College at this crisis, as drawn up by the Regents, Marcy, Van Rensselaer, and Talmadge.

In November following he commenced an elaborate course of instruction on the *Materia Medica* in Rutgers Medical College, which institution, with a majority of his former associates, Drs. Hosack, Francis, and Mott, and Drs. Griscom and Godman, was now organized in New York, at an expense of twenty-four thousand dollars, and opened at the usual period for the fall and winter courses. The success of this new school was demonstrative of the high opinion the public cherished for this well-known faculty, and it continued its operations with increased renown, and gave the strongest assurance of its beneficial services to medical and philosophical knowledge. After four years, however, its doors were closed, in consequence of legislative enactments, and Dr. Macneven, with his fellow-professors, ceased his labors as a public teacher.

It will thus be perceived that, amid the vicissitudes which marked the history of the College of Physicians and Surgeons and the Rutgers Medical College, Dr. Macneven for more than twenty years was engaged as a professor of medical knowledge,

and justice to his memory requires us to state that for that long period he was most assiduous in contributing, with zeal and ability, to promote the soundest interests of a responsible and important science. He had left the State school which he had helped to rear, in a condition of great prosperity, both in reputation and in the number of its pupils, and which, at the commencement of its career, had yet to secure the approbation and support of the profession. Its anomalous government, and the capricious measures of the trustees, were of themselves sufficient to distract the best councils and lead to results at war with that wise policy essential to great issues. In the ardent contentions which were maintained between the faculty and the trustees, Dr. Macneven's pen bore a powerful part in vindication of his colleagues, and several of his able compositions of sufficient pungency on the subject may be found in the third volume of his learned associate, Dr. Hosack's, *Essays*. The appeal to the Regents of the University, and to the legislature, on behalf of the incorporation of Manhattan Medical College, written by an actual student of the school, may be consulted by the curious reader solicitous of enriching his mind with medical politics. This manly effort for the creating of a new and independent medical and chirurgical school, was approved almost unanimously by the higher branch of the legislative councils of the State, and only failed through the lateness of the hour at which the act of incorporation was introduced to the consideration of the Assembly of New York. It was unquestionably a most benighted hour for the interest of knowledge, when the authority of the Regents was made subservient to the extinguishment of so laudable a design to advance Hippocratic wisdom.

As a professor, Dr. Macneven was learned as an instructor, and ample in his exposition. His erudition gave him peculiar advantages. The stores of ancient and modern science were equally accessible to him, and he was ever ready to communicate. In chemical philosophy he was universally esteemed to hold a high rank. His studious disposition enabled him to penetrate the hidden wisdom of the astute and scholastic, and close attention to the progress of discovery imparted new

powers, with each returning term of the College, to improve his lectures and add new illustrations to experimental truths.

It remains to notice briefly his literary labors. His "Rambles in Switzerland" have been already mentioned. His "Pieces of Irish History," and his numerous political tracts, which his eventful life was the cause of occasionally bringing forth, evince how deeply rooted in his bosom were the political vicissitudes of his country; and this sympathy with the land of his birth, he cherished to the latest period of his existence. With Hugh Williamson and David Hosack, he was an active promoter of the organization of the Literary and Philosophical Society of New York, and contributed to the first volume of its Transactions a minute analysis, with medical reflections on the remedial qualities of the mineral waters of Schooley's Mountain, New Jersey. He deemed them valuable in nephritic disorders and in calculous complaints. As his colleague, the erudite Mitchill, at the commencement of his experimental and collegiate career, twenty years before, had in his instruction urged and defended the Lavoisierian system, so did Macneven press upon the attention, with the zeal of a proselyte, the atomic theory of Dalton; and his "Exposition of the Atomic Theory," which he printed in 1820, was received with favor, both abroad and at home, and reprinted in the French Annals of Chemistry. As co-editor of the "New York Medical and Philosophical Journal," a work which, made up chiefly of selections, he projected, with Dr. Benjamin De Witt, in 1812, he wrote several papers on subjects strictly medical. He also published, in 1821, with emendations, an edition of Brande's Chemistry. His professional worth secured him several advantages. Governor De Witt Clinton appointed him Resident Physician of New York, an office which he held for several years, and in 1840 he received the same favor from Governor Seward. He was early a member of the Literary and Philosophical Society, and in 1828 he was elected a Fellow of the American Philosophical Society. When the Asiatic cholera made its first appearance in New York, in 1832, the municipal authorities selected him as one of its council. A passing remark may here justifiably be intro-

duced. The official Reports of the Medical Board, during that awful crisis, again and again affirmed it as their most mature conviction, that the pestilence presented no evidence of a contagious or communicable character, the better to diminish the alarm created by the fearful visitor; yet, notwithstanding these official annunciations, Dr. Macneven and others of that sanitary guardianship, believed the disorder to be a *nova pestis* in this country, and that its progress through the land was best explained by considering it a specific disease, and regulated by the law of a *sub modo* contagion.

That the life of Dr. Macneven was one closely devoted to knowledge and its promulgation, is demonstrated by the brief record now given of his principles and acts. He was a prodigious reader, and his love of books was a prominent passion with him, and no medical man of the faculty among whom he resided surpassed him in philological pursuits, and in the acquisition of languages. He was a classical scholar, and ready with citations from the most approved English writers. He spoke German and French with the same facility as the English; and in the Italian, unlocked with delight the treasures of Dante and Ariosto. His native tongue, the Irish, as it was the first he had learned, so through life he conversed in it with fluency.

His burial was honored by a large attendance both of adopted and native citizens; and as at the funeral of his illustrious friend, the great jurist, Thomas Addis Emmet, there was but one feeling which pervaded all hearts, and one sentiment uttered by all lips; so at the interment of Dr. Macneven all felt that learning had lost a distinguished ornament, real knowledge a true disciple, the charities of life an ardent friend, and patriotism one who had sustained martyrdom in her glorious cause.

JOHN W. FRANCIS.

JAMES THACHER.

1752—1844.

WHETHER viewed as a patriot, faithfully serving his country in the darkest period of her history ; as a man of science and extensive literary acquirements ; or simply as an active and honorable member of a humane and noble profession, the subject of this sketch eminently deserves a prominent page in the historical annals of his country.

James Thacher was born in 1754, at Barnstable, in the colony of Massachusetts. From a brief memoir in the volume of Medical Biography, by the late Dr. Stephen Williams, we learn that his mother was the daughter of a Mr. Norton, of Martha's Vineyard, and granddaughter of ex-Governor Coggeshall, of Rhode Island. Paternally, he was descended from one of the most learned and useful families in the colony. In "The Magnalia," by Cotton Mather, we have the biography of Dr. Thomas Thacher, who is represented to have been a learned physician and clergyman of Massachusetts ; from whose pen emanated the first medical publication in that colony.

It was a tract or monograph, entitled "A Brief Guide in the Small-Pox and Measles;" and published in the year 1677.* Dr. Williams tells us that "no less than sixteen graduates of the name of Thacher appear in the triennial catalogue of Harvard University, from 1671 to 1832, nine of whom were clergymen." The name of the subject of this memoir, however, is not on the list, and we have no evidence that he ever enjoyed

* See History of American Medicine before the Revolution, by Dr. J. B. Beck.

the advantages of a full collegiate education; although his writings abundantly show that his mind was early stored with, and disciplined by, the elementary branches of learning. At the early age of sixteen he manifested his predilection for the study of medicine, and soon after commenced his period of pupilage under Dr. Abner Hersey, a physician who then enjoyed a high reputation and extensive practice in his native town. Under the guidance of this highly esteemed preceptor, young Thacher enjoyed good advantages for acquiring medical knowledge, and improved them with a faithfulness amounting to enthusiasm. His period of pupilage closed in 1775, at the age of twenty-one years. It was just the time when the long-smothered fires of patriotism in the Colonies had broken forth into flames of open revolution. The blood which stained the fields of Lexington and Concord had not only severed the last tie that bound the people of the American colonies to the mother country, but had also caused the clarion notes of war to vibrate over every hill and valley in the land. Stepping upon the stage of active life at such a moment, it is not strange that the heart of young Thacher was found beating in unison with the glorious spirit of the times; or that his feelings of patriotism and love of rational liberty, should cause him to hazard his all in the cause of his country.

Hence one of his first acts was to apply for a place in the medical department of the Continental army. Taking a letter from Joseph Otis, Esq., of Barnstable, he proceeded to Watertown, and made his application personally to James Warren, Esq., who was then President of the Provincial Congress. He was received by this eminent patriot with great cordiality and kindness on the 3d of July, 1775. On the 10th, his name was added to the list of candidates for examination by a medical board consisting of Drs. Holton and Taylor. The examinations of this board seem to have been faithful and severe; for of the sixteen candidates examined, only ten were admitted as qualified for duty. Dr. Thacher, however, passed through this ordeal with credit, received from the Provincial Congress the appointment of surgeon's mate in the hospital at Cambridge,

and entered upon the discharge of his duties on the 15th of July, 1775. At that time Dr. Benjamin Church was Director-General of the hospital, and Dr. John Warren the senior attending surgeon. The institution occupied several private houses in Cambridge, and was filled with the soldiers wounded in the battle on Breed's Hill, and so many sick with various diseases as to afford constant employment for the medical officers. In February, 1776, Dr. John Morgan, of Philadelphia, was appointed by Congress Director-General of Hospitals in the place of Dr. Church; and Dr. Thacher, after undergoing another examination by him, was appointed surgeon's mate to Dr. David Townsend, in one of the regiments stationed on Prospect Hill.

This regiment was commanded by Colonel Asa Whitcomb, and was actively engaged in the laborious duty of fortifying the heights of Dorchester, where they were almost daily anticipating an attack from the whole British force stationed in Boston.

After the British had evacuated the city, and the American army had taken possession, the small-pox was found so prevalent that inoculation was very generally resorted to. The regiment to which Dr. Thacher was attached, consisting of five hundred men, were all subjected to the disease by inoculation, and he tells us in his Journal that all recovered except one negro.

When the soldiers were again fit for duty, this regiment, together with that of Colonel Sargent, was ordered to march to Ticonderoga, on Lake Champlain, where they arrived in the latter part of August, 1776. In April following, Colonel Whitcomb's regiment, having served out the period of time for which they were enlisted, returned home; but Dr. Thacher immediately received the appointment of surgeon's mate in the General Hospital, and remained on duty at Ticonderoga until that post was abandoned by our army. He accompanied the sick and wounded to Fort Edward, and subsequently to Albany. While on duty in that city, the final conflict took place between the northern division of the American army under General

Gates, and that of the British army under General Burgoyne. The two hardfought battles, which preceded the surrender of Burgoyne, took place only about thirty miles from the General Hospital, and many of the wounded officers and soldiers were immediately transferred thither. Six days after the surrender of General Burgoyne, Dr. Thacher made the following entry in his military journal, which we quote for the purpose of showing the nature of his duties, and the faithful and humane manner in which he discharged them.

“This hospital is now crowded with officers and soldiers from the fields of battle; those belonging to the British and Hessian troops are accommodated in the same hospital with our own men, and receive equal care and attention. The foreigners are under the care and management of their own surgeons. I have been present at some of their capital operations, and remarked that the English surgeons perform with skill and dexterity, but the Germans, with few exceptions, do no credit to their profession; some of them are the most clumsy and uncouth operators I ever witnessed, and appear to be destitute of all sympathy and tenderness towards the suffering patient. Not less than one thousand wounded and sick are now in the city; the Dutch Church, and several private houses are occupied as hospitals. We have about thirty surgeons and mates; and all are constantly employed. I am obliged to devote the whole of my time, from eight o'clock in the morning to a late hour in the evening, to the care of our patients. Here is a fine field for professional improvement. Amputating limbs, trepanning fractured skulls, and dressing the most formidable wounds, have familiarized my mind to scenes of woe. A military hospital is peculiarly calculated to afford examples for profitable contemplation, and to interest our sympathy and commiseration. If I turn from beholding mutilated bodies, mangled limbs, and bleeding, incurable wounds, a spectacle no less revolting is presented, of miserable objects, languishing under afflicting diseases of every description; here are those in a state of mournful despair, exhibiting the awful harbingers of approaching dissolution; there are those with emaciated bodies and

ghastly visage, who begin to triumph over grim disease, and just lift their feeble heads from the pillow of sorrow. No parent, wife, or sister, to wipe the tear of anguish from their eyes, or to soothe the pillow of death, they look up to the physician as their only earthly friend and comforter, and trust the hands of a stranger to perform the last mournful duties. Frequently have I remarked their confidence in my friendship, as though I was endeared to them by brotherly ties. Viewing these unfortunate men as the faithful defenders of the liberties of our country, far separated from their dearest friends, who would be so lost to the duties of humanity, patriotism, and benevolence, as not to minister to their comfort, and pour into their wounds the healing balm of consolation? It is my lot to have twenty wounded men committed to my care, by Dr. Potts, our surgeon-general; one of whom, a young man, received a musket-ball through his cheeks, cutting its way through the teeth on each side, and the substance of the tongue; his sufferings have been great, but he now begins to articulate tolerably well. Another had the whole side of his face torn off by a cannon ball, laying his mouth and throat open to view. A brave soldier received a musket-ball in his forehead; observing that it did not penetrate deep, it was imagined that the ball rebounded and fell out; but after several days, on examination, I detected the ball lying flat on the bone, and spread under the skin, which I removed. No one can doubt but he received his wound while facing the enemy; and it is fortunate for the brave fellow that his skull proved too thick for the ball to penetrate. But in another instance, a soldier's wound was not so honorable; he received a ball in the bottom of his foot, which could not have happened unless when in the act of running from the enemy. This poor fellow is held in derision by his comrades, and is made the subject of their wit for having the mark of a coward."

On the 20th of December following, we find, in his journal, the following note:

"The wounded soldiers committed to my care in October last have all recovered; and as a compliment for my assiduity

and attention to my patients, I have received from Dr. Potts, our surgeon-general, a generous and handsome present."

Two years and a half had now elapsed since young Thacher left his home and attached himself to the fortunes of the patriot army; and the duties of the hospital being greatly diminished, he asked, and readily obtained, a furlough, or leave of absence, for forty days. Though in the middle of winter, he made the journey from Albany to Boston and Barnstable on horseback; visited his friends, and returned to the hospital ready for duty two days before the expiration of his furlough. Early the following season, the hospital was removed to the Highlands, further down the Hudson, and Dr. Thacher continued on duty in it until he was advanced to the rank of surgeon, when, at his own solicitation, he was transferred from hospital service to that of field surgeon, and attached to a regiment chiefly from the South, under the command of Colonel Gibson. At another period he was selected as the surgeon to a picked corps of light infantry, chosen from the several New England regiments, and under the immediate command of Colonel Alexander Scammel. This corps "consisted of the most active and soldierly young men and officers," and was designed to march in advance of the main army, constantly prepared for the most active and hazardous duty. His selection as surgeon to this corps was a high compliment, but not higher than his skill and faithful devotion to the duties of his station had entitled him to. From this time Dr. Thacher accompanied nearly all the more important movements of the Continental army to the end of the war. Whether in the camp or in the field—whether under a single tent amidst the snows of a Northern winter, or on the rapid march under the burning rays of a summer sun—he shared fully in all the privations, the toils, and the glories, that were endured and achieved by the defenders of our country during that eventful period of its history. Even in the last important conflict, the siege of Yorktown, he accompanied the corps sent forward in the darkness of the night to open the last entrenchment necessary to complete that siege.

The great struggle of the Colonies for independence having

been finally crowned with success, and the war actually closed, we find, on the 25th of December, 1782, the following entry in his journal:

"It is with inexpressible reluctance that I contemplate a separation from the numerous friends with whom I have so long associated in the most harmonious and pleasing intercourse. Engaged in the same glorious and honorable cause, encountering together the same perils, suffering unparalleled hardships and privations, and participating in the most interesting scenes and events, our mutual and cherished attachments are no less ardent than the ties of brotherly affection. Friendships formed under such circumstances, and cemented by purity of sentiment, must prove as lasting as our days on earth; and we shall ever cherish a sincere interest in the welfare of the companions of our military career.

"It will be to me a source of infinite satisfaction, during the remainder of my days, that I have shared in the toils and perils of war, during seven and a half years, in defence of my country and its freedom; and that the mighty struggle terminates in peace, and the establishment of our national independence. This momentous event should be considered as a rich blessing which Providence bestows on us for the benefit of the present and many future generations. It is incumbent on me to express my unfeigned gratitude to the All-wise Author and Preserver of men, that he has been pleased to confer on me innumerable blessings, and preserved my life and health during a long period while exposed to the greatest hardships and imminent perils."

Again, on the 1st of January, 1783, he writes as follows:

"This day I close my military career, and quit forever the toils and vicissitudes incident to the storms of war.

"To my military companions I bid a final adieu, and hope to enjoy in future the blessings which attend a virtuous course of domestic life. . . . While I congratulate my country on the momentous event by which we are about to be elevated to the rank of an independent nation, most cordially do I proffer

my sympathy for the many lives of inestimable value which have been sacrificed during this ever-memorable contest."

He retired with the most full and honorable testimonials to his punctuality, professional skill, and faithful performance of duty, in all the stations he had been called to fill. During his long connection with the army, he enjoyed the confidence and society of its highest and most gifted officers, including General Washington himself. Nor was his attention entirely absorbed by his professional duties, for he found time to keep a record or journal of all the important events that transpired during the war. This journal was published by Dr. Thacher, with an appendix, containing brief biographical sketches of the principal officers of the American army, in 1824. It was dedicated to his Excellency, John Brooks, then Governor of Massachusetts.

A second edition was issued in 1826, and it was republished, with appropriate illustrations, by Silas Andrus & Son, of Hartford, in 1854. It is a full-sized octavo volume, of about 500 pages, and constitutes one of the most reliable and interesting historical works that we possess.

On leaving the army, Dr. Thacher settled in Plymouth, Massachusetts, and entered upon the ordinary practice of medicine and surgery. Having already the active sympathy and gratitude of the community, he soon became engaged in an extensive and laborious business. The practical duties of his profession, however, were not allowed to engross his attention to the exclusion of literary and scientific pursuits. On the contrary, his mind, released from the long-accustomed excitements and anxieties of his military career, seemed to turn with great energy and pleasure to the cultivation of science. In 1802, he communicated a paper, entitled "Observations on the Art of making Salt from Sea-water, &c.," to the American Academy of Arts and Sciences, of which he was a member. The paper was well received, and published in the Transactions of the Society for that year. He soon after furnished to the Historical Society of Massachusetts a paper "On the Natural Production of Iron Ore, with a Description of Smelting Furnaces, &c., accompanied by several specimens of Iron Ore." This was published in the ninth

volume of their Transactions. In 1810, he had completed, and caused to be published, his "New American Dispensatory," which soon became a standard work in the profession, and passed through four editions during the succeeding eleven years. In the same year, he received the honorary degree of Doctor of Medicine from Harvard University.

He next wrote a work entitled "Modern Practice of Physic," which was published in 1817; and a second edition of which was issued in 1821. In the latter year, he also published a "Monograph on Hydrophobia," exhibiting much research, and containing many valuable facts. In 1822, he had ready for the press the "American Orchardist," a second edition of which was called for in 1825.

In 1828, his work on "American Medical Biography" was published, in two volumes. This was the first attempt made in this country to perpetuate the memory of distinguished American physicians, by collected biographical memoirs.

These volumes were exceedingly interesting and valuable; and a few years preceding the death of the author, he was solicited by many to prepare a new edition with additions, but the infirmities of great age prevented him, and the work has been suffered to pass entirely out of print. In 1829, he furnished his publishers with a "Practical Treatise on the Management of Bees;" and two years after, a very curious and interesting volume on "Demonology, Ghosts, Apparitions, and Popular Superstitions." The last work written by Dr. Thacher, worthy of special mention, was the "History of Plymouth," published in 1832. This was an interesting volume, and was received by the public with sufficient favor to call for a second edition in 1835. From the foregoing list of works, it will be seen that Dr. Thacher was not only a voluminous writer, but also that his studies embraced a wide range both in science and literature.

He furnished a considerable number of valuable papers to the medical and other periodicals. He also devoted much attention to antiquarian researches, in which he felt an enthusiastic interest. He was an active member of the Pilgrim

Society of Plymouth, and of the Massachusetts Medical Society. All the writings of Dr. Thacher bear the impress of a mind disciplined by careful study, sharpened by long-continued habits of observation, and well stored with facts. Hence they were anxiously sought for by the public, and generally read with profit.

Throughout his whole life he maintained a private character above reproach. During his protracted connection with the army, his military journal affords abundant proof of his sterling integrity, his high sense of honor, and his constant readiness to applaud virtue and condemn vice. In mentioning a high sense of honor, we do not mean that false idea of honor which has led so many foolishly to hazard their lives in accordance with the *code duello*. This practice, which caused the loss of several valuable lives during the Revolutionary war, is alluded to, only to be condemned, in all the writings of Dr. Thacher.

As a physician, he ever exhibited that urbanity and kindness which so quickly win the confidence and esteem of the sick. As a citizen, he was public-spirited, a patriotic lover as well as defender of his country, and a liberal supporter of the civil and religious institutions of the community in which he lived. He was small in stature and physical development, light and agile in his movements, fond of social intercourse, yet regular and studious in his habits. During a few of the last years of his life he was afflicted with a difficulty of breathing, which interfered much with his exercise and social enjoyments; but which he bore with patience and cheerfulness. He came to his death, serenely and peacefully, in May, 1844, in the 91st year of his age. As a patriot of tried integrity, as a learned and honorable physician, as an eminent contributor to the advancement of science and literature, and as an active defender of his country in the darkest days of her history, Dr. James Thacher, of Barnstable, Massachusetts, is worthy of grateful remembrance by the present and all future generations.

N. S. DAVIS.

GEORGE McCLELLAN.

1796—1847.

GEORGE McCLELLAN was born at Woodstock, Windham County, Connecticut, on the 23d of December, 1796. He was descended from an old Scottish family, who had emigrated to this country at an early period, from Kirkcudbright, Galloway, Scotland, where they had taken an active part in all the wars, both civil and foreign, of their native land, from the days of William Wallace down.

His family had mostly remained for several generations in the town where he was born, and many of its members had been engaged in the war of the Revolution with considerable distinction.

His early education was obtained from the Academy of his native town; one of those New England schools which, although at that time embracing but a limited scope in their studies, were thorough in their teaching, and have been the foundation of the career of many of our ripest scholars and most distinguished men. Here he derived a thorough training in the rudiments of Latin, Greek, and mathematics. At the early age of sixteen, in the year 1812, he entered the Sophomore class of Yale College, New Haven, at that time under the Presidency of Dr. Dwight. His collegiate life was marked by singular quickness of perception, readiness in the acquisition of knowledge, and an enthusiastic but immethodical devotion to his studies.

His talent particularly displayed itself in mathematics and the languages; in the former he showed proficiency, while in the latter his attainments were far above mediocrity. He also

manifested a fondness for the natural sciences, and his zeal and success in their cultivation are favorably recorded in the early numbers of the *American Journal of Science*.

Whilst at college, becoming much attached to the celebrated and now venerable Professor Silliman, he formed a close friendship and intimacy with him which lasted through life. Through his influence he was attracted to the above mentioned studies, more especially botany, mineralogy, and geology, which he cultivated by reading with extreme fondness, even during the busiest portions of his after professional career. In 1815, he obtained his academical degree, with a high reputation for knowledge in certain branches, and for the remarkable vigor and quickness of intellect which he had evinced.

He immediately afterwards commenced the study of medicine in the office of the late Dr. Thomas Hubbard, of Pomfret, near Woodstock, who subsequently became Professor of Surgery in the Medical College at New Haven. In 1817 he came to Philadelphia to attend the lectures in the University of Pennsylvania, at that time the only medical school in this city, and, it may be said, in this country.

Here he entered the office of Dr. Dorsey, Professor of *Materia Medica* and Anatomy in the University, as a private pupil, and remained with him until his early and lamented death, in 1818. "Here again," to use the words of his distinguished friend, Dr. Samuel G. Morton, "his restless activity and sleepless vigilance in the pursuit of knowledge, were remarked and admired by all; exciting the surprise of his fellow-students, and drawing from older heads the presage of future distinction."

In 1818, a year before his graduation, he was elected Resident Physician to the Hospital of the Philadelphia Almshouse, and whilst there showed the most enthusiastic devotion and application to the study of medicine and surgery. Perhaps few men ever laid a better or more thorough foundation for a future successful career than did Dr. McClellan during the period of his pupilage; working day and night in the dissecting-room, taking notes of all the lectures, reading with avidity and with patience all important books within his reach, he

stored up knowledge which, in the rapid accession of private practice that soon attended him—besides the habit of study and close application,—was of the utmost importance, and aided, perhaps as much as his superior intellect, to hurry him at an early age into the successful business of his profession.

That there is “no royal road to knowledge,” was clearly exemplified in his early preparation. The copious note-books collated whilst in his collegiate course at Yale, and in the lecture-rooms and hospitals, as well as in the earlier years of his private practice, and which are now in the possession of the writer, evince the painstaking and patient labor of many years, which few, who were only acquainted with his busy, active habits, and mercurial disposition in later life, could appreciate.

“Here,” quoting from the excellent memoir written by Dr. W. Darrach, who was a fellow-resident at the Hospital with him, “ever advancing in medical knowledge and ever communicating, he became our daily mental stimulus. His unrivalled unison of eye and hand, has been mentioned; with equal truth, I notice also his equally remarkable unison of a rapid mind and tongue. Neither at his meals, nor in his bed, can I recall to mind McClellan. My associations of him relate to his rapid walkings; rapid and constant talkings; his perpetual prescribing, manipulating, experimenting; his autopsies and operations rapid; rapidly at it, and always at it! Book after book on medicine he constantly and rapidly read, and clearly and pleasantly detailed, making us listen to him. He provoked us to physiological experiments. Each corpse in the dead-house was marked by his autopsy and surgical operations. Thus he sometimes made trouble, easily quieted though, for the people even then seemed intuitively to know that McClellan was appointed to be their head doctor, in spite of all the great doctors; and they let McClellan do anything. In surgical matters he was ever active, testing and trying whatever he had read or heard of. On one occasion, I well remember, that while reading, he jumped from his chair, and exclaimed, ‘Mott, of New York, it is said, has taken up the innominata for aneurism, and I believe it.’ Having immediately afterward left us a

while and then returned, he exultingly exclaimed, 'I've done it!' He had gone to the dead-house, and there imitated Mott's operation on the subject. Such in 1818-19, at the age of twenty-two years, was the deportment of McClellan, in the Philadelphia Almshouse."

In the year 1820, he married into an influential family of Philadelphia, and had already become established as a practitioner. During the very first year of his practice, he performed many of the most important operations in surgery, such as lithotomy, extraction of the lens for cataract, and extirpation of the lower jaw. He opened a dissecting-room, and gave private courses of lectures, both on anatomy and surgery, "displaying that same vivacity of manner which characterized him through life, and he became an attraction to medical students. His attentive class, consequently, became very soon so numerous as to require for their accommodation a larger room."*

His more public career, as a lecturer, began in 1826, when he founded the Jefferson Medical College, of his connection with which, and with the different medical schools in this city, I shall quote from his biography, written by the late Dr. S. G. Morton, his colleague for many years, and to the time of his death his most valued and intimate friend. As an actor in most of the events described, and as a daily adviser of Dr. McClellan, his authority is of more weight than any other that could be advanced.

"After having given a private course of anatomical lectures, Dr. McClellan conceived the bold idea of founding a new medical school. With him, thought and action were simultaneous; a memorial was addressed by himself and others to the legislature of Pennsylvania, and a charter was obtained in the winter of 1825, for the Jefferson Medical College.

"I venture to assert, from a personal knowledge of the time and circumstances, that no professional innovation was ever more unfavorably received by the physicians of Philadelphia, than this. It had a direct tendency to isolate its author, and

* Dr. Darrach's Memoir.

certainly influenced his destiny throughout life. It was assumed and asserted, that there was not patronage for the support of two schools, and that the new one could only succeed at the expense of its elder rival. And, inasmuch as the whole scheme was regarded as a professional heresy, it need not be added that its partisans met with no favor.

“Dr. McClellan reasoned differently: he maintained that students would flock to this city in numbers proportioned to the increased facilities for education; and that each institution might be amply supported without any conflict of interest. What has been the result? In place of five hundred students, which was the maximum number before this competition was organized, Philadelphia now enrolls, annually, a thousand; embracing a portion of the genius and talent of every State of the Union.

“It is important, however, to observe that, owing to the general disapproval of the plan of a new college, Dr. McClellan met with great difficulty in organizing a medical faculty; and his colleagues were unavoidably chosen from among men greatly inferior in talent to himself. Incongruous elements were thus associated together; dissensions arose, and disunion followed. Yet, notwithstanding all these adverse circumstances, Dr. McClellan had the satisfaction, in the year 1836, to welcome no less than three hundred and sixty pupils into the school he had founded.

“Dr. McClellan's lectureship was Surgery; and he continued his instructions, in this branch, until the year 1838, when, for reasons unknown to the writer of these pages, the professorships of Jefferson College were all vacated, by a decision of the Board of Trustees, and a new organization took place, from which Dr. McClellan's name was excluded. This new faculty was composed of men of distinguished attainments. The medical public acquiesced in the change; Jefferson College was received into favor, and collegiate competition was legitimized. So true is the adage that times change, and we change with them: ‘*Tempora mutantur et nos mutamur cum illis.*’

“Dr. McClellan thus lived to experience the proverbial mis-

fortune of most pioneers and discoverers, who sow the seed of which others reap the harvest.

"Mortified, but not discomfited, by this adverse issue of his cherished plans, Dr. McClellan immediately conceived the project of a third medical school; and with characteristic buoyancy of spirit and determination of purpose, he went in person, accompanied by a single professional friend, to solicit a charter from the State legislature. Corporate privileges were, in consequence, granted to an institution, entitled 'The Medical Department of Pennsylvania College,' at Gettysburg, and McClellan, with five associates, of whom the writer was one, commenced the initiatory course of lectures in Philadelphia, in November, 1839.

"This institution had an auspicious beginning, in a class of nearly one hundred pupils, between which number as a maximum, and eighty as a minimum, it continued under the direction of the same faculty, for four consecutive years. Notwithstanding this seeming prosperity, it is due to Dr. McClellan's memory to state, that some injudicious pecuniary arrangements, entered into in the first instance, and in which he had no part, tended to embarrass the institution, through the entire period to which we have alluded.

"The sinister effect of these arrangements was soon felt by all concerned; and nothing but a mutual sense of honor sustained the faculty, in combined execution, during four annual courses of lectures, the last of which terminated in the spring of 1843.

"Soon after this date the entire faculty resigned their professorships into the hands of the trustees. The motive that influenced a part of these gentlemen in taking this step may be inferred from the preceding statement; other members were influenced, at least in degree, by other considerations, to which it is unnecessary here to advert. It may, perhaps, be safely asserted, that Dr. McClellan was the only member of the faculty who reluctantly abandoned this his last and cherished enterprise. His zeal and enthusiasm could see nothing but success in the future; and he never abandoned the conviction that fur-

ther perseverance would have been crowned with commensurate reward."

Though, as above remarked by Dr. Morton, "he lived to experience the proverbial misfortune of most pioneers and discoverers, who sow the seed of which others reap the reward," it is still a great satisfaction to those who early sympathized with him in his exertions, and still survive, to see the success of the institutions he founded, amidst the difficulties and conflicts of the complications of the times. The Jefferson Medical College now enjoys the first rank among the medical schools of this or any other country, a very distinguished private pupil of the founder occupies his favorite chair of Surgery, and the last institution which he established, the Pennsylvania Medical College, still flourishes, and promises a successful career of usefulness and profit to the profession.

✓ In fact, for Dr. McClellan may be claimed the sole authorship of the extended system of medical education as it now exists in this country. The clinical instruction of the colleges was originated by him, and the many schools in the different sections of our Union derive their origin from the impetus given by him.

Whilst here summing up his career as a public teacher, it may not be amiss to allude to his peculiar style of lecturing. It was purely extemporaneous, not what is usually called so, reciting matter previously committed to memory; he *thought aloud*; his mind, well stored with the subject and trained by early classical education and logical deduction, expressed itself in a natural manner and diction, which has never been excelled. Utterly unconscious of those around him, giving himself up to the subject before him, his lectures achieved a popularity and produced an effect seldom equalled. * "He was remarkable for exuberance of thought; and this attribute was responded to by corresponding volubility of speech. In lecturing, or in conversation, he was never at a loss for words; yet, in spite of this amazing fluency, his ideas manifestly accumulated more rapidly

* Dr. Morton's Biographical Notice.

than his tongue could give them utterance." During the latter part of Dr. McClellan's life, he obtained one of the largest practices known in the country; his name had extended to the Old World, and on this continent he attracted patients from all parts of our Union, and the West Indies and South America. Few men in private practice have operated so frequently. His list included almost every capital operation known to surgeons, together with others that were original with himself; and these multiplied efforts of his genius were rewarded with a full share of success.

In ophthalmic surgery he was particularly eminent. The number of his operations for cataract and other diseases of the eye was remarkable, and for extraction of the lens he was very successful, and among the first to introduce it here.

Many of the operations in surgery, which are now quite common, were not employed in this country in the earlier period of his practice; and he shared with Mott of New York, and Warren of Boston, the credit of establishing many procedures new on this side of the Atlantic.

He performed lithotomy nearly fifty times with great success, mainly by the lateral operation, and was one of the first to use the high or supra-pubic method here. Lithotripsy was also performed by him in very many cases.

As early as 1823, he amputated the body of the lower jaw, an operation which was afterwards repeated by him many times, as well as disarticulation from either side.*

The upper maxillary along with the malar and a portion of the external angular process of the frontal bone, including the lachrymal gland, was removed by him prior to Mr. Lizars's operation, and subsequently he exsected the bone in other cases, even involving a greater extent of structure.†

The extirpation of the parotid gland, so long a mooted point and source of serious contention among surgeons, was performed by him eleven times, ten of which were successful, as

* See Cooper's *First Lines on Surgery*, English edition.

† See McClellan's *Surgery*, pp. 364, 365.

will be seen by the following quotation of a note by the editor of his surgery :*

"It may not be amiss here to claim for the author the credit of having done more than any other surgeon, by the number and success of his operations, to establish completely, as safe and feasible, the extirpation of the parotid gland.

"In tracing back the records of surgery, we find, prior to his first operation, in 1826, several isolated cases, which prove that among the earlier surgeons, even as far back as the celebrated Heister, of whom Borden, in his 'Researches' on the Glands, page 53, remarks, in speaking of the parotid, 'On ne peut s'empêcher d'admirer l'adresse, et le courage de Heister, qui est dit avoir emporté toute cette glande,' there were some bold enough to attempt this really formidable operation, and to consider its successful execution not only within the bounds of probability, but of reason and security.

"Still, at that period, their authenticity was not only questioned by the majority of the profession, but the many dangerous anatomical obstacles involved, as well as the deep and almost inaccessible situation of the gland, rendered its removal at least so serious an undertaking that it was laid down by most authors as extremely hazardous, and even characterized, in the strong language of John Bell, as 'impossible and absurd.'"

The case of Beclard, only a year or two before, having terminated fatally, did much at that time to prejudice opinion against the operation. Cases which have since been reported as having been performed previously, were not then made known; and, on the whole, as regards boldness in entering upon a new and scarcely explored field of surgery, the first case of Dr. McClellan may be considered as almost an original one. "There was then no record of the difficulties and complications of this operation; nothing laid down to guide the adventurer as to the dangers likely to be met with in his progress through an untried region; and the very first case undertaken by him

* See McClellan's Surgery, pp. 364, 365.

had been previously attempted and given up by eminent surgeons abroad. The accumulated experience of European and American surgeons has now, however, completely demonstrated its practicability, and we may safely place it among the standard and established operations of surgery.”*

The parotid gland has now been repeatedly removed by various surgeons, but no one has done so much to effect the change of opinion regarding the operation as Dr. McClellan. He extirpated eleven entire parotids, in various conditions of organic disease, and only one of his patients died in consequence of the operation: that one sank under coma on the fourth day after the operation, from the effect of the ligature around the common carotid artery. The other ten patients recovered, and seven of them were alive and well at the time of his death. Only one of these died from a return of the disease in the same part three years after recovery from the operation.

His operation for exsection of the ribs was, at the time of its performance, novel.

In 1838 he removed successfully, on account of an encephaloid cancer, the whole of the upper extremity, including the scapula and clavicle, with success; an operation which was never attempted before or since, save once by Dr. Gilbert, in a less degree.

Indeed, his scope in surgery extended as far as that of any man who had gone before him, and beyond others of his own time, embracing every species of operative procedure, repeated again and again with remarkable success.

Nature and early education had eminently fitted him for an operative surgeon, and his thorough knowledge of anatomy led him to attempt without hesitation many things from which others would recoil. Every cut of the knife was made with a confidence that could only result from positive knowledge.

With regard to his editorial labors, I shall again quote from Dr. Morton:

“ Dr. McClellan’s excellent classical education was blended

* McClellan’s Surgery, pages 321, 322.

with a continued fondness for literary pursuits, and a lively interest in general science. He read much, but wrote little. He always took up his pen with reluctance; and it was only at the earnest and long-continued promptings of his friends that he at length commenced his 'Principles of Surgery.' The first printed sheet was placed before him during his brief illness, but he was already too much exhausted to notice its contents. The work, however, has been ably edited by his son, and it is now before the world an abiding memorial of the skill and genius of its author.

"Novelty in practice is not the test of excellence or superiority in either surgery or medicine. The annals of our profession are full of proofs of the truth of this axiom. Dr. McClellan has made no parade of originality; but he has set forth, with the hand of a master, the multiplied experience of more than a quarter of a century; and this experience was, no doubt, as extensive as that of any private practitioner among us during that long period of professional toil. Skill, decision, and promptness were in him remarkably conspicuous, and they were combined with a judgment that had become matured in the school of observation and reflection. In the 'Principles of Surgery' we find no temporising treatment, no timid practice, but the positive knowledge of a mind that knew and relied upon its own resources."

In earlier years he was a contributor of original papers to different medical periodicals, and was one of the conductors of the "American Medical Review and Journal;" he subsequently edited an edition of "Eberle's Theory and Practice of Physic," with notes and additions.

His work on surgery was only commenced within the last few months of his life. The constant interference of a large practice prevented him from writing, except at uncertain and irregular intervals. Many of its pages were penned whilst suffering acutely from disease; and relief from pain was often sought by occupying his mind with the work. As if forewarned by some indefinite impression that he might not be spared to carry out his entire object, he seemed bent upon hastily finish-

ing what was meant to be the first volume, and its earlier pages were actually passing through the hands of the printer whilst he was preparing the closing ones. Suddenly cut off in the midst of his labors, the work was necessarily incomplete.

Beside his surgical labors and his literary efforts, as is usual in this country, where no one can devote himself entirely to surgery, his medical practice was large, and perhaps he prided himself as much upon it as upon his operations. Thoroughly acquainted with all the theories of the times, he acted from the principles of common sense, the old Baconian system of deduction, which he always advocated in his lectures. To exemplify this, I will quote from a valedictory address delivered by him to the graduating class of Jefferson Medical College, in 1836.

"In regard to the best mode of cultivating your profession, I shall have time to say but a few words. Recollect what I have so often, and so constantly urged on your attention, respecting the rules of inductive science. Be always governed by the observation of symptoms, and not by the imaginary causes of them. The whole science of nature consists in the classification of phenomena. We can do but very little in the way of theory, and nothing in the way of hypothesis. Be content, I beg of you, to follow the dictates of common sense, in all cases and under all circumstances. Be satisfied with the opinions you can form from a plain and careful examination of the indications which nature holds up to your view; and reject all inquiry into the secret and undefinable causes of life and disease. You cannot imagine the advantages which you will gain by such a course of practice, over those who are governed by the long-exploded precepts of the schoolmen—revived and repolished, as it must be confessed they have been, by the innovators of France. While they are balancing doubts and difficulties, and vibrating from one conjecture to another, you will be fortified by the calm and unchangeable dictates of sound reason and philosophy."

The remaining portion of Dr. McClellan's life, after he retired from lecturing, was spent in the active duties of his profession. For some years he was afflicted with neuralgia, com-

encing on one side of the head, which afterwards extended throughout all his limbs and body; but he bore it with singular fortitude, and would not allow it to interfere with his daily duties.

Some men live in months or weeks what would be to others as years. Time will not measure the actions and deeds of men; and the subject of this memoir was one of those who in unceasing activity, wore out the vital forces, which in others would have lasted to a period far beyond the age at which he died.

His final illness was severe; his death sudden. On the morning of the 8th of May, 1847, he assisted in the performance of two surgical operations. He came home soon after noon, complaining of indigestion, which was quickly followed by symptoms analogous to those of bilious colic. These increased every moment in severity. Medicines at length afforded some mitigation of his sufferings, and, for a short time, gave promise of relief; but it was presently observed that, as his pain abated, exhaustion and restlessness followed. These symptoms increased towards evening, and at eleven o'clock at night, to the surprise and dismay of his family and friends, the hand of death was evidently upon him. His mind continued clear, but his articulation became hurried and indistinct. At midnight he was pulseless, and soon afterwards fell asleep; and in this state of unconscious tranquillity, he died, at half-past one o'clock the same night, in the fifty-first year of his age.

At a post-mortem examination, ulceration of the mucous coat of the bowels was discovered, and a perforation, a few inches below the sigmoid flexure of the colon, as the immediate cause of his sudden death.

Few men have had warmer and more attached friends; and were this intended for a long memoir, many most interesting instances of his close intimacy with the distinguished men of his time might be detailed. He possessed a sensitive and generous spirit, blended with a confiding manner, that strongly marked his intercourse with men. His feelings were quickly excited and warmly expressed at the sense of unkindness or in-

justice ; but there was a magnanimity in his nature that readily forgave an injury. Ever ready to afford assistance, whether professionally or otherwise, with generous impulses and forgetful of self, he attracted the most unbounded popularity among the poorer classes, as evinced by their strong manifestation of respect at the time of his death. His name is still a household word among them.

J. H. B. McCLELLAN.

JACOB RANDOLPH.

1796-1848.

THE life of a physician is essentially a history of private benevolence, rather than of public renown. It is internal and contemplative, and abounds in charitable acts and deeds of Samaritan kindness. Devoid of stirring adventure by field and flood, its current, though strong and deep, is too quiet to awaken fully the sympathy of the masses. With the latter the story of a Cæsar, a Napoleon, a Tamerlane, is ever more attractive. The medical practitioner lives in and for his art and its scientific developments, and his constant endeavor is to ameliorate the condition of his fellow-man. Neither in the forum, nor in the pulpit, nor yet in the tented field, can he be heard and admired by many. His scene of labor is the chamber of the sick and the wards of the hospital. Here only can he display his strength, and assert his claims to be regarded as man's benefactor. The biography of the physician, measured by its external every-day events, like that of the naturalist, the historian, the poet, and the inventor, is, of necessity, short, and to most readers uninviting; estimated by its internal manifestations, by its intellectual exertions, it is voluminous and replete with scientific and philanthropic interest. Still more worthy of contemplation is it as a record of the just, whose blessed memory perpetually ascends as a fragrant odor before the Almighty. The faithful rendering of such a biography becomes at once a precept and an example, an argument and an exhortation, awakening in the minds of all who may read and ponder thereupon, the determination to press steadily forward in a like honorable career. Such biographies constitute

brief, but deeply important chapters in the history of society, in the history of humanitarian progress and amelioration. Of this character is the following narrative of one who is every way worthy, in his particular sphere, of being held up as a shining exemplar.

JACOB RANDOLPH, the subject of this memoir, was born in Philadelphia, on the 25th of November, 1796. He was the sixth son of Edward Fitz-Randolph, an ancestor of whom, bearing the same name, emigrated from England in 1630, and settled at first in New England, and afterwards, near the close of his life, in New Jersey.

Edward Fitz-Randolph, upon the breaking out of the War of Independence, attached himself as an officer to that part of Wayne's brigade known as the Fourth Pennsylvania Regiment, and commanded by Col. Richard Butler. In this capacity he served during the greater part of the revolutionary struggle, freely lending all his energies to the cause of liberty. He took part in the battles of Trenton, Princeton, Germantown, and Monmouth; he commanded the outlying guard at the surprise and fearful massacre of Paoli, and he suffered, in common with many other patriots, the biting hunger and cold of Valley Forge. The Revolution over, he settled in Philadelphia, entered into mercantile business, and was long known as a respected and influential member of the religious Society of Friends. At an early period of his life he dropped the first part of the family name.

His son Jacob received an English and classical education at the Friends' school-house, in Fourth Street. Having completed his literary studies in 1814, he entered the office of Dr. Joseph Woollens, of the Northern Liberties, as a student of medicine. His preceptor dying soon after, he placed himself under the guidance of Dr. Cleaver, at that time a busy and reputable practitioner of the same district. Having attended for the prescribed time the medical lectures of the University of Pennsylvania, the degree of Doctor in Medicine was conferred upon him in 1817. He was then twenty-one years of age.

Shortly after his graduation he sailed for China, in the capacity of ship-surgeon. He suffered so much from sea-sickness, however, that he was compelled to abandon the vessel at her first stopping-place in England. During his absence he visited Scotland and France, and in a few months returned home, and opening an office in his native city, commenced his career as a practitioner of medicine.

About this time he became acquainted with Dr. Philip Syng Physick and his family, and was united in marriage to his eldest daughter in 1822.

In 1830 he was appointed Surgeon to the Almshouse Infirmary, and in the same year commenced to lecture upon Surgery in the School of Medicine, an institution established for the purpose of summer teaching. For several years he faithfully performed the duties of these two posts, and obtained, at this time, his first success in that branch of practice in which he was destined to occupy so prominent a position. In 1835, his reputation as one of the leading surgeons of the country being now fully established, he was elected, upon the resignation of Dr. Hewson, one of the surgeons of the Pennsylvania Hospital. This important and highly responsible post Dr. Randolph still held at the time of his death.

In 1840 he again visited Europe, and spent two years there, a close observer of the surgical practice of the Parisian hospitals. During his absence he was elected Professor of Operative Surgery in Jefferson Medical College. But as the acceptance of this appointment would have compelled his speedy return, he declined it at once. Upon the occasion of his return he was complimented with a dinner, the spontaneous expression of the high respect in which he was held by his professional brethren. He now resumed his practice as a consulting surgeon, devoting himself especially to the treatment of stone in the bladder.

In 1847, after occupying for some time the position of lecturer upon Clinical Surgery to the University of Pennsylvania, he was elevated to the professorship of that branch, a chair

created especially for him, and which, since the resignation of Dr. Norris, his successor, has not been filled.

In the early part of his medical career Dr. Randolph, according to the testimony of his most intimate friends,* evinced but little or no inclination towards that department of practice in which he was afterwards destined to excel. It was not, indeed, until after his marriage, and after he had been engaged for several years in general practice among the poor of his neighborhood, that his views began to shape themselves definitely towards operative surgery. His father-in-law, Dr. Physick, appears to have urged him to this course, in consequence of recognizing in him those qualities of coolness, firmness, and good judgment, combined with a certain manual dexterity, which constitute the basis of all surgical skill. The zeal with which he subsequently pursued the details of surgery, and the success which accompanied him in this responsible field of labor, could not be better shown than by referring to the fact that, in 1829, being then in his thirty-fourth year, he successfully amputated, with consummate skill, the lower jaw of a patient afflicted with osteo-sarcoma. The details of this case, illustrated with a drawing of the patient as he appeared before and after the operation, were communicated to the "American Journal of Medical Sciences," for November, 1829. Thirteen months later—in February, 1831—Dr. Randolph published, in the same Journal, an excellent paper on the nature and treatment of Morbus Coxarius. In this, as in the preceding article, he gave indubitable evidence of possessing that sound, discriminating judgment so necessary to the surgeon.

At this time he was rapidly acquiring an enviable reputation for surgical ability; and this reputation he pushed to a still greater extent by taking up, in 1831, and introducing into this country, the operation of Lithotripsy, which, in the hands of Baron Heurteloup, was at that time engaging so much attention in Europe. Attracted by the reports of the triumphant

* See Dr. Geo. W. Norris's Biographical Memoir of Dr. Randolph, read before the College of Physicians, August 1st, 1848.

success which had attended the Baron's efforts in destroying calculi in the bladder by means of percussion, Dr. Randolph studied the subject with much care and experimented upon it fully and laboriously. "He has frequently told me," says one who knew him intimately,* "that it was by industry and perseverance alone that he had acquired skill in this delicate operation, and that before attempting it in his first case, he had not only made himself master of all that had been written upon it, but had also embraced every opportunity in the dead house, of which his situation at the Almshouse Infirmary at that time afforded him many, of putting a stone into the bladder, and catching and destroying it. These previous trials gave him a facility in the introduction, withdrawal and manipulation of the lithotritic instruments, as well as a prudent confidence in his abilities, which led to his success. All who witnessed his operations upon the bladder, will admit the extraordinary skill and dexterity which he possessed in handling these instruments in that viscus; a dexterity which, in my own opinion, was not surpassed even by the eminent discoverer of the method himself.† In speaking of these operations, it must be added that he attributed much of his success to the use of the most simple instruments only, to not desiring to operate quickly, or to do too much at one sitting, and to invariably withdrawing the instruments when pain was complained of, and putting off the operation for another day. These opinions he always expressed when conversing on his results; and in his operations, no matter who might be present, or how large a number might be gathered to witness the procedure, he never deviated from them. The fear of loss of fame, or the desire of notoriety as an operator, had no influence with him; and more than once, when unexpected difficulties arose in seizing the stone or its fragments, I have

* Dr. Norris. Opusc. citat. p. 10.

† Dr. Isaac Hays, another intimate friend, and sometimes his assistant in his lithotriptic operations, also expresses his admiration of the neatness and skill displayed by Dr. Randolph in his manipulations. Upon this, in no small degree, his great success appeared to depend.—*American Journal of Medical Sciences*, November, 1835.

seen him close and withdraw the instrument, and disappoint the spectators. From the period he first engaged in the operation of lithotripsy, he devoted himself in an especial manner to the treatment of calculus, and with the exception of the Professor of Surgery at Lexington, Kentucky, he is believed to have treated more cases of that disease than any other surgeon in our country. At the time of his decease, no less than three cases of this rare complaint were under his care. One, a child in the hospital, he had just prepared for lithotomy, the other two had both been brought from distant parts of the country by his reputation as a lithotritist. In one of them he had but just commenced the operation, and in the other, a gentleman who was the last patient he ever visited, he made a final, very careful examination, and had the satisfaction of finding him cured of his distressing affection."

In the "American Journal of Medical Sciences," for November, 1834, Dr. Randolph published an account of six cases of stone in the bladder, in which he had performed the operation of lithotripsy with signal success. Two of these cases were operated upon in the autumn of 1832, two in the spring, one in the summer, and one in the fall of 1833. With characteristic and commendable caution, Dr. Randolph delayed making known the details of these cases. The motives which prompted him to this course are shown in the following paragraph, with which he opens the account above alluded to:

"A degree of surprise," he writes, "will probably be excited in the minds of some who read this paper, at my having so long delayed giving an account of the following cases; but I have been actuated by two motives in withholding their publication: in the first place, I wished that a sufficient length of time should elapse to test fairly and fully the results of the operations; and in the second place, the several cases presented themselves so simultaneously, that I was unwilling to give an account of one until the whole were completed. Had I, in truth, consulted merely my own feelings, it is probable that I should not even at this period have consented to the publication of this brief outline of the cases; to this step I confess I have been

principally induced by the advice of my valued friend, the editor of this journal, who urged that the alleged success of the operations might be called in question, unless an authentic report of them were made to the profession."

Two years later, November, 1886, he published in the same journal, "an account of seven additional cases of stone in the bladder, in which the operation of lithotripsy was successfully performed." Finally, in November, 1887, he gave to the public the details of four other cases successfully treated, making seventeen in all in a period of five years.

Dr. Randolph was endowed in a high degree with all the attributes of the great surgeon. He was thoroughly grounded in the fundamental principles of surgery, and no one excelled him in his acquaintance with those practical minutiae which so materially influence the results of operative surgery. His eye and hand were exceedingly steady, his sense of touch highly educated, and his judgment above all exact and reliable. He was remarkable not only for his skill as an operator, but also for his accuracy in surgical diagnosis and prognosis. "Surgery with him," as Dr. Norris has well observed, "was, what in the hands of the truly great in our profession it ever has been, a conservative art. His pride was to repair injuries and cure diseases without a resort to the knife, and the operative part of it he regarded as that of least moment." His high reputation as a successful operator was attributable in no slight degree to the care with which he selected and prepared his patients, to his minute and methodical arrangements before the operation, to the wise admixture of caution and decision, of prudence and boldness, which characterized its performance, to the readiness with which he met and obviated any unforeseen difficulties, and the unceasing attention which he bestowed upon the after treatment. Sympathizing deeply with his patients in their sufferings, he made them feel that he was their warm friend as well as their skilful surgeon. Untried novelties in surgery and hazardous operations he always avoided, unless sanctioned by the most weighty reasons. He generally employed the most simple dressings and apparatus, and scrupulously avoided all vain parade or useless display while operating.

Possessing such skill as a surgeon, and enjoying so many opportunities to improve his art, it is to be regretted that Dr. Randolph has not contributed more extensively to the literature of his profession. Besides the publication already mentioned, he communicated to the "North American Medical and Surgical Journal," for 1829, the history of a case of femoral aneurism in which the femoral artery was tied for the second time in the city of Philadelphia. In the "Medical Examiner" he published an account of the removal of the parotid gland. Scattered through the pages of this journal will be found many of his clinical lectures delivered at the Hospital. His most extensive literary production is "A Memoir on the Life and Character of Dr. Philip Syng Physick," which was read before the Philadelphia Medical Society in 1839, and published by order of that body. From the pages of this able and well-written memoir of the Father of American Surgery, many of the exemplary traits of character of Dr. Randolph himself are clearly reflected.

Dr. Randolph was a member of the American Philosophical Society, of the Philadelphia College of Physicians, and of the Philadelphia Medical Society. He was also one of the consulting surgeons to the Philadelphia Dispensary.

He possessed a cheerful and amiable disposition; his manners were frank and prepossessing, and the firmness with which he adhered to his resolutions and opinions was only equalled by the slowness and caution with which they were formed. Throughout his whole career he exhibited a brilliant example of professional honor, conscientiousness, and straightforward dealing. Among those most noted in these particulars he towered up clearly conspicuous. Filled with a profound sense of the duties of a physician, to his patients on the one hand, and to his medical brethren on the other, and imbued with a thorough contempt for all the arts and practices which are so strongly discountenanced by a high sense of professional propriety, his daily walk was characterized by a remarkable degree of candor, courtesy, and kind consideration for the feelings and opinions of others. On some occasions he would express his

views upon the subject of medical ethics with much emphasis; and as a proof that in his daily practice and professional intercourse he strictly adhered to his own high standard, we have not only the evidence of the medical men who had the best opportunities of observing his course, but the very significant fact of his great popularity in the profession itself. No man probably had more warm friends and fewer enemies among physicians than he. To the younger members of the profession he was especially endeared, in consequence of his exceedingly kind, encouraging, and liberal treatment of them. For those of his patients who were in indigent circumstances, he performed many acts of charity and considerate kindness.

In early life Dr. Randolph was an exceedingly handsome man, and at all times he exhibited a remarkably commanding appearance. His face was oval, regular in its features, and expressive of the frankness, independence, and energy of his character. In stature he was somewhat above the middle height, and his whole person displayed the signs of an unusual amount of health and vigor. His sudden decline and death, preceded as they were by none of the usual signs of constitutional decay, painfully surprised both his family and his numerous friends.

About two weeks before his demise, he was seized with what appeared to be an attack of intermittent fever. At first his case presented no alarming symptoms; in the course of a few days, however, a sudden and copious hemorrhage from the bowels supervened, with the effect of reducing his strength to such an extent, that it soon became evident that his end was approaching. With characteristic calmness he prepared for death, fully sustained and cheered in these, his last hours, by the hopes and promises of religion, in which, previous to his illness, his interest had been freshly awakened. Very soon the first hemorrhage was succeeded by several others, and though his robust frame enabled him to resist their weakening effects for some days longer than could have been expected, his strength at last failed him entirely, and he expired on the morning of the 29th of February, 1848.

J. ANKEN MERRILL.

AMARIAH BRIGHAM.

1798—1849.

AMARIAH BRIGHAM was born at New Marlborough, Berkshire County, Massachusetts, December 26th, 1798. His father was a highly respectable farmer, who died after an illness of several years, leaving a widow and six children. His estimable and eminently pious mother, regarding only the welfare of her beloved child, was induced, soon after the death of her husband, to accept the offer of his brother, a physician of considerable reputation living at Schoharie, New York, to take Amariah into his family, and educate him to his own profession.

Though the youngest of four sons, and only eleven years of age, of a slender and delicate frame, and possessing a constitution by no means vigorous, he left the home of his childhood, with all its endearments, to spend, as was then supposed, the several succeeding years beneath the roof and under the guidance and direction of his paternal uncle. One short year, however, only elapsed before he too followed his deceased brother, and his youthful charge was again left without a guide, without means, or other counsellor than his wise and affectionate mother. He was naturally a thoughtful and self-reliant boy, made so, in part, by the circumstances of his condition, which had served to awaken and develop these qualities of his mind. This we may safely infer also from the fact that, not long after his uncle's death, at an age which could not much have exceeded thirteen years, he made his way to Albany alone, and there, without a friend to assist or advise him, procured for himself a place as clerk in a book-store, where he spent the

three following years. Here he performed the round of duty which usually devolves upon boys occupying a position of this kind, but, it is said, had much leisure time, which he spent not slothfully or in idleness, nor in the society of thoughtless or vicious companions, but in the constant reading of books to which he had access. While his reading was, doubtless, without a definite plan, and probably quite miscellaneous, he here acquired a fondness for books, and habits of study, which ever after constituted a noticeable feature of his character. Indeed, the numerous observations which he made while abroad, relating to historical and other matters with which he was manifestly quite familiar, may, many of them, be safely referred to this, as the time when he first became conversant with them. Here, too, he also had an opportunity to acquire a knowledge of men, as well as of books, which he would not be likely to neglect; and by having no one to look up to for counsel or assistance, developed still further that confidence in himself which his destitute situation required.

On leaving Albany, he returned again to New Marlborough, where his mother now resided, and there spent the four following years; at first in the studies usually pursued by advanced pupils in our schools, and at length entering the office of Dr. E. C. Peet, of that town, as a student of medicine.

It does not appear that his advantages during any part of this preparatory course at all exceeded those that usually fall to the lot of medical students, or that he obtained a diploma from any medical college. One of his biographers says, "he spent a year in New York attending lectures," which, in the absence of other evidence, may fairly be supposed to signify that he attended during a single session or term, which at that day was regarded by the profession as sufficient to qualify a candidate to enter upon practice. Subsequently, and before commencing the active duties of professional life, he spent about a year with the late Dr. Plumb, of Canaan, Connecticut; and from a brother practitioner now of Hartford, but who then resided in a neighboring State, and often saw him, we learn that, while his habits of study were somewhat peculiar and

original, he was, nevertheless, a diligent and successful student. The period which elapsed between the time of his leaving Albany and entering upon the duties of his profession must have been a little less than five years, all of which was spent in the pursuit of knowledge, either of a professional or general character.

Having acquired a fondness for books, improved, and, to some extent, tested the powers of his mind, during his residence in Albany, he was, indeed, in some respects highly favored in the privileges which he enjoyed in the quiet town in which he spent the several following years. Here was nothing to be found calculated either to distract his mind or to call off his thoughts, even temporarily, from study; while the great fact constantly stood forth fully, and sometimes, doubtless, painfully, before him, that he was to be the sole architect of his own fortune. He commenced practice as a youth somewhat short of his majority, in the town of Enfield, Massachusetts, where he remained but two years. He removed thence to Greenfield, Franklin County, a large and flourishing town, lying on the Connecticut River. Of his history while at Enfield we are left to conjecture; but the fact that, after so short a period of practice, he should have felt himself qualified to submit his claims to notice and support, to so searching an ordeal as that of a refined and cultivated community, and was willing to risk the results of active professional competition, shows, at least, his estimate of himself, and his confidence of success. His determined boldness stands out in still stronger relief when we learn that he purchased, at the outset, the entire property of a practitioner then in ill health, a brother of Judge Washburn, consisting of a dwelling-house and out-buildings, horse, carriage, library, &c., the payment of which not only absorbed the savings of the previous years, but must also have involved him pecuniarily to some extent. Here that industry and system in the management of his affairs, that patience, and accuracy of observation, and soundness of judgment which characterized his after years, were exhibited and largely developed. Here, also, shone forth those genial social qualities which made him every-

where welcome, and the delight of a large circle of admiring friends. He practised at Greenfield uninterruptedly about seven years, and it is well known that he early secured the confidence of his fellow-citizens, was extensively patronized, and eminently successful. He was especially fond of surgery, and achieved considerable reputation in this branch of our art, indeed, so much that he became widely known, and was largely employed in this department. That he was during all this time a diligent student and growing man, though fully employed in the active duties of his profession, we learn in part from the fact that he prepared and delivered a course of popular lectures on chemistry while here, at once indicating great fondness on his part for natural science, and much careful study of a branch which it would otherwise have been supposed he would most likely neglect. Besides, he began with his professional life that most improving of professional exercises, a detailed daily history of every case he was called to treat, a practice certain to sharpen the powers of observation, excite to study and research, improve the reflective faculties, strengthen and mature the judgment; while it also gives one imperceptibly a readiness in the use of the pen, a capacity of expression, which are not the growth of a day, but which, when acquired, become invaluable to the possessor. He at times, also, left temporarily the field of his active labors, ostensibly for relaxation, but in fact, that by visits to the larger cities, intercourse with their medical men, and examinations of their hospitals, he might increase his store of practical knowledge.

That a young man, but twenty-nine years of age, whose purse had always been slender,—whose scanty support, for several years previous to the commencement of professional life, had been procured, in part at least, if not wholly, by teaching, during the winter months, district schools,—whose opportunities for mental improvement had been such only as are usually regarded as inferior, and even meagre,—whose self-denials of every sort had been many and great,—should so soon, upon the removal of this burden from his mind and spirits, have aspired not only to high rank in his profession, but have boldly

resolved to do what very few then undertook, and still fewer of these from resources of their own earning, for the purpose of improving himself professionally and otherwise, by foreign travel, exhibits to every one who reflects upon the procedure, a degree of self-reliance, intelligence, and manly courage, not often equalled. It appears, however, that it was a plan which he devised while engaged in active practice, the contemplation of which, as the obstacles to its fulfilment yielded one by one to his prolonged reflections, was a solace, doubtless, to many a dark and weary ride. He had already, in a period of seven years, paid for the place which he purchased on commencing business at Greenfield, had steadily added to his library, lived suitably to his position, and, besides, had accumulated means sufficient, with the sale of his property, to meet the expenses incident to a voyage to Europe, which he had now decided to make, and a year's residence there. In the fulfilment of this purpose, he was obliged, though most reluctantly, doubtless, to leave the place in which he had spent the dawn of his manhood, had numerous friends, and unquestionably many and tender attachments. He left on this voyage July 16th, 1828, then in his thirtieth year. It would be interesting and instructive to follow him in his travels, which embrace a tour and residence, more or less prolonged, in England, Ireland, Scotland, France, Italy, Sicily, and Spain, and extract liberally from his voluminous journal, but the space allotted us will not permit. He made a daily record of his observations, indeed, of whatever especially attracted his notice, which formed five folio volumes in manuscript. It is apparent from these, and, I think, will be admitted by those who subsequently became acquainted with Dr. Brigham, that the basis of that character, which was afterward so well illustrated in a public capacity, was fully established before he went abroad. His systematic, independent, and often original observations and descriptions, show that those qualities of mind from which they spring were already well developed and in active exercise. He visited most of the larger hospitals and benevolent institutions in the countries through which he passed, and describes, often minutely, their

architectural characteristics, internal arrangements, general management, &c., and often adds a description of the personal appearance and manner of lecturing of the distinguished physicians in attendance.

He left London in October for Paris, and passed a month in the latter city, in visiting the public and benevolent institutions and places of note, and especially those devoted to art. Here as well as elsewhere, judging from his manuscript notes, he seems to have spent much time at the Louvre, and other places where either superior pictures or statuary were to be found, indicating a much stronger relish for such works than he was generally supposed to possess. He then took tickets at the School of Medicine, where he continued in daily attendance on the lectures for three months.

He occasionally attended lectures at other institutions, and at the various hospitals, on all of which occasions he made copious observations descriptive of buildings, internal arrangements, &c., as in London.

Every day seems to have been fully and well occupied in collecting useful information, as well as valuable materials for thought and reflection in after years. His habits while in Paris were eminently social, his evenings, many of them,—indeed the majority of them,—having been spent in general society. His diary, in its description of the forms of etiquette observed at the social and larger parties at which he was present, as well as the comments often accompanying, indicate how close an observer of men and things he was at that period.

And here we would observe, and it is worthy of notice, that though his journal contains only the hastily-written observations of each day, and was doubtless prepared without a thought of its ever being opened to the inspection of any other than his own eye, or possibly to the glance of here and there a partial and trusted friend, it is characterized in its entire extent both by correctness of thought and expression. There is not to be found in it anything at variance with good taste or sound morals, but, on the contrary, everything to indicate great

purity of heart and correctness of conduct, although at that time he was not controlled by any special religious scruples.

Just before quitting Paris, he made a visit to the institution for the Deaf and Dumb, founded by Abbé de l'Epée, in 1760, of which he gives a very interesting detailed account, evincing the deep interest he then felt in the educational as well as other benevolent establishments for the care and elevation of the unfortunate.

During his stay at Genoa he visited, among other places, the Hospital for Incurables, of which he thus writes:

"It is a noble institution, and has the look of being old, as it is embellished with the statues of many of its benefactors, that look old and black. The number of inmates is between eight and nine hundred, I think. The bedsteads are of iron, but without curtains or posts for them. The rooms are spacious, tolerably well aired, and clean for an old house. I noticed most of the incurables were deformed,—maimed men, women, and children, also maniacs. These last interested me much. I was surprised to see them all—that is, all the crazy men—in one room, and without any partitions. Most of them had strong chains, fastening them to their beds; and I saw some in the women's apartment, where they were eating a breakfast of lettuce and oil, I thought. But O the fury and noise!—probably some excited by my entering. Some were hallooing, some laughing, some eating, and screaming like fiends. Some beckoned to me with fury, others with smiles. In fact, I never had so perfect an idea of bedlam as in these rooms, where are from fifty to a hundred crazy people. It seems very wrong that all should be thus together, as their beds joined, and nothing intervened."

From Genoa he went to Pisa, and from thence to Florence and to Rome, stopping, however, at other less important cities, and remaining long enough in each place to make an intelligent notation of whatever was of historical interest, exhibited the manners and customs of the inhabitants, or the practical working of their civil and political institutions. The extent of his survey, and his numerous and interesting comments, bear ample

testimony of his industry and peculiar habits of observation, and show that he was a man of methodical mind, of quickness of perception, of much more than ordinary powers of analysis, and, further, that he was a man of extensive reading.

On his route to Italy he visited the Maddalena, a lunatic asylum situated between Capua and Naples, and founded by Murat. He thus writes: "It is spacious, and has a large garden and church attached to it. It contains about five hundred patients, who are well attended, and treated with great gentleness and indulgence. Each pays about fifteen dollars a month, which defrays all expenses. I noticed one singular but pleasant arrangement,—the windows, from the outside, look as though they were filled with beautiful flowers; but, on examination, I found that the iron grates had been made thus, and painted, in order to give a pleasing appearance to the eye. The contrast between this and the asylum I had just seen at Genoa was great and striking. Here they are all comfortable and cleanly, and well attended; there they were all confined in one room, each chained to his bed—the ravings of one exciting others, so that, when I entered, the shouting, swearing, and attempts to break their chains for a moment frightened me. I cannot believe another such horrid bedlam exists on earth."

He spent several weeks in Naples, during which time he twice visited the long-buried cities of Pompeii and Herculaneum, and also Vesuvius. The relics of Pompeii, as all now know, are numerous, and, even then, had been collected and well arranged under the auspices of the government. These he saw again and again, enumerates the several classes into which they were divided, and describes many of them with considerable minuteness.

Leaving Italy, he proceeded to Sicily, but his stay at Messina was short, and nothing occurred which it is necessary to notice. Here he took ship for the United States, stopping only at Gibraltar, where they were detained many days, which gave him an opportunity to visit the principal objects of interest to be found here—the fortress, town, &c.—which he did not fail to improve.

At length they set sail, and landed at Boston, July 4th, 1829, twelve days less than a year from the time he embarked at the port of New York.

After making hasty visits to some of his relatives, he once more returned to Greenfield, Mass., and again commenced the active duties of his profession, about the middle of August. He was now near thirty-two years of age, and his ambition had in no respect been cooled, nor his confidence in himself abated, by travel and a more extended acquaintance with the world. It was not long, therefore, before he began to cast about for a more conspicuous and lucrative field of labor; and having received a friendly invitation from some of the most intelligent and influential citizens of Hartford, Connecticut,—among them several of its leading physicians,—to make it his residence, he concluded to do so, and removed to that place some time during the month of April, 1831. Of the number of those who expressed a desire to this end was the late Rev. Daniel Wadsworth, who, to other inducements, added the offer of an eligible office, rent free. In every respect his qualifications for taking an elevated position, both professional and social, were far greater at the time of his settlement at Hartford than when he had presented himself, a youthful candidate for practice, to the citizens of Greenfield. He was now matured in intellect, his character was established, his attainments, both theoretical and practical, highly respectable in every department of his profession; while his manners, and knowledge of men and the forms of cultivated society were superior. He came to Hartford, as I have been informed, rather as a surgeon than physician, there being at that time a more than usually favorable opening for one well informed in this department. He at once took the elevated position for which it was anticipated he was well prepared, and maintained it, in and out of the profession, so long as he remained here. He at no time wanted for business, nor had he ever any anxiety about it, and for many years his income was probably not far from \$2500 per annum.*

* It is due both to the truthfulness of this sketch, and also to the gene-

He always had an office, where he kept his library, chiefly professional, of about two thousand volumes,—many of them in the French language, which he read with correctness and facility,—quite a variety of surgical and medical apparatus, casts, dry and wet specimens in morbid anatomy, drawings, &c., which, coupled with an easy, not over-cleanly look, made it not uninviting, either to the common people or to gentlemen. He generally, if not at all times, had one or more students, who enjoyed the use of his library, saw considerable office and other practice, and had the benefit of his kind and sufficiently familiar intercourse. He prepared for professional life some who are now highly respectable and useful practitioners, in whose air and bearing, as well as in their views of things, can be traced the impress of their teacher's influence. To his other qualifications as a physician, his careful and patient investigation of disease, and acknowledged skill in diagnosis resulting therefrom, sound common sense and superior judgment were added; making him at the same time a successful practitioner and valuable counsellor. It was a not uncommon practice with him, on going out of town for the purpose of consultation, to ascertain beforehand something about the character of the case, and carry with him some standard author who treated of the disease in question. He did not stand in fear of any inference which such a proceeding might have, either upon the mind of the patient, his friends, or the practitioner in attendance.

In society, he mingled in preference with that class characterized by refinement of manner, cultivation of taste and intellect, and who at the same time enjoyed in due degree the social glass, a quiet game of whist, a good dinner, and granted large

rosity and kindness of heart which it exhibits, to state, that, in consequence of an unexpected loss of some magnitude, and other minor contingencies, Dr. Brigham, soon after taking up his residence in Hartford, was obliged to ask the favor of a loan of \$500. It was promptly granted by a recent acquaintance, with no other security than the Doctor's own name, and in due time cheerfully paid; and it has been my pleasure lately to read a letter, written but the winter before his death, expressive both of his vivid recollection of the transaction, and the deep gratitude which he had never ceased to feel for the kindness.

freedom of opinion, both religious and political; rather than the more stern, rigid, and puritanical, who in that day required, as a condition of good fellowship, not only intelligence and a becoming deportment, but decided temperance in eating and drinking, particularly the latter, an orthodox faith and practice, and sound whig sentiments. I mean not to be understood as intimating that he was not on friendly terms with, or did not entertain the highest respect for, many of those from whom his opinions, and, to some extent, his practice, differed, and for whose society he had no special relish; nor that he was not, in return, appreciated and largely patronized by them; for it was notoriously true that he was, perhaps, more largely consulted by clergymen than any other practitioner then resident in Hartford.

In politics he was a democrat, and so devoted to party that he made its distinctive issues a prominent topic of conversation on the eve of exciting elections, attended party meetings, at which he sometimes spoke, and interested himself to such an extent in the result as to allude to it afterwards, when his excitement had abated, as a matter of surprise even to himself. When he first became a resident of Hartford, infant schools were in operation, and in high public favor; also a method of arousing the public mind, and creating a strong religious interest, by means of what were known as "protracted meetings," when a whole community, or an entire denomination in a city, would devote ten days, and sometimes even a fortnight, to religious purposes, in the progress of which a high state of nervous excitement would, almost of necessity, take place on the part of many of the more devoted among the worshippers, and conversions also, in numerous instances, were claimed to follow.

Though he was a regular attendant at the First Congregational Church, and, as has elsewhere been said, sincerely respected religion, and all needful religious ordinances, without being a professor, or particularly interested in the subject itself, he set his face boldly and earnestly against both of these popular customs of the times; giving his views to the public in regard to the former in an unpretending little volume, entitled.

"Influence of Mental Cultivation on Health," published in 1832, and also one in regard to the latter, entitled "Influence of Religion on the Health and Physical Welfare of Mankind," published in 1836. To the latter work I shall hereafter briefly refer, and shall only stop to say of the former that it reached a third edition, which was published by Lea & Blanchard, of Philadelphia, in 1845,—an edition having been previously issued at Glasgow, by Dr. Robert Macnish, and another at Edinburgh, by James Simpson, Esq., advocate, each preceded by a preface, highly commendatory of the character and object of the work.

About this time the cholera first made its appearance on this continent, attended in many places with a frightful mortality, and spreading terror through the country. It seemed at the time like a direct visitation of God, sent to afflict the nations, so steadily and rapidly did it advance, in spite of every opposing barrier—so mysteriously, and with such fatal power, did it fall upon its victims—so little was it amenable to treatment, and so little as to its pathology was revealed by dissection. No medical man, whether young or old, could fail to look with searching scrutiny upon a phenomenon so obscure, yet so appalling, scan with the utmost care the features of the disease, study its history, and inform himself, so far as possible, as to the most successful way of managing it. Dr. Brigham did more than this. He not only studied the disease with care, but published, during the same year, a work which he styled, "A Treatise on Epidemic Cholera." It is an octavo volume of three hundred and sixty-eight pages, accompanied by a map, showing the route westward of the cholera, from the place of its supposed origin. It contains, of course, little strictly original matter, but consists chiefly of selections from reports, treatises, lectures, and essays, and was intended, as its author states, "to furnish a correct history of the disease, together with all the most important practical information that has been published respecting its nature, causes, and method of treatment." The work probably had a limited sale, and added

little either to the purse or reputation of its author, though much discriminating labor and research were expended upon it.

Regarding himself, about this time, as permanently settled in Hartford, he married, January 28d, 1833, Susan C. Root, of Greenfield, an accomplished lady, to whom he had undoubtedly become attached while in practice there. She, with their four daughters, still survives, to mourn the irreparable loss of an affectionate husband and father.

The next, which was the last systematic work published by Dr. Brigham, was entitled, "An Inquiry concerning the Diseases and Functions of the Brain, the Spinal Cord, and the Nerves;" a duodecimo volume of upwards of three hundred pages, appearing in the winter of the year 1840. It was prepared while the author was engaged in practice as a physician and surgeon, and, doubtless, with no more than a general reference to the specialty to which he subsequently and so soon devoted himself. Though small and unpretending, it is a valuable work, which might well find a place in the library of every practitioner, as a book to be carefully read, and not unfrequently consulted with advantage. It found a ready sale, and it is believed was favorably received by the profession. These several volumes constitute the greater part of his literary labors while a resident of Hartford, though he occasionally prepared an article for some medical journal, and sometimes for the newspapers; and, becoming interested, if not a believer, in the doctrines of phrenology as set forth and advocated by Gall and Spurzheim, is said to have lectured acceptably on the subject.

He also, in 1837, having probably become tired of the harassing labors devolving upon him in the discharge of his duties, accepted the professorship of anatomy and surgery in the College of Physicians and Surgeons, New York. He spent a year and a half there, but finally returned again to Hartford, preferring the comparatively active life to which he had so long been accustomed, with all its attendant inconveniences, to a permanent residence in New York.

The little volume which he published in 1836, on the

"Influence of Religion on the Health," was attacked with spirit, in one quarter at least, and led to a controversy in print as caustic and bitter as disputes of this nature usually are. It also created, in connection with his strong party views, prejudices in the minds of many worthy and influential citizens. Their opposition, however, was probably made up, in a pecuniary point of view, by the favor of those whose good-will and patronage were thereby secured. But when he became a candidate for the office of physician and superintendent of the Retreat for the Insane, at Hartford, Connecticut, which he did in 1840, he found in its board of directors a number of those who had conscientiously opposed him previously, and who felt unwilling to intrust the interests of that institution to his hands. Their opposition was at length, as is well known, overruled, and the appointment conferred, as was afterwards demonstrated, upon one well qualified for the position.

That perfect system which, as we have already seen, had become an element of his character, was at once brought successfully to bear upon every department of the institution, so soon as he became its principal officer, and each subordinate had marked out for him, and was made duly responsible for, the discharge of his duties.

A long and extensive acquaintance with general society enabled him, both in sentiment and manner, to adapt himself to all classes of the inmates, so that, without wounding the pride or sensibilities of any, he equally secured the confidence and respect of all. He was not only a man of order, but was also a superior disciplinarian; and while every person, whatever his position, was treated with justice, and, the patients especially, with the utmost kindness, none were indulged with undue license, and all felt the restraining and controlling influence of the governing head.

His previous studies and practice had been such as to make him unusually familiar with the treatment of nervous diseases, and his success while at Hartford, indicated the soundness of his pathological opinions, and the correctness of his treatment.

His discussion of topics relating to the medical jurisprudence

of insanity, as he met with illustrative cases,—his investigations relating to the pulse of the insane, the size and shape of the head, the condition of the senses, the temperature of the body, and the state of the secretions, together with his remarks on the medical treatment of the insane, which are embodied in his annual reports, published while connected with the Retreat, exhibited a capacity for intelligent inquiry, a willingness to *search* for facts, and a fondness for them, most creditable to himself, and which added very much to the value of the reports themselves.

The office which, as we have seen, he accepted in the spring of 1840, it was expected by all would terminate, probably, only with the life of the incumbent. However, in the fall of 1842, to the surprise and regret, I believe, of every officer and friend of the Retreat, as well as to a large circle of friends in Hartford, it was announced that Dr. Brigham had accepted a similar appointment tendered him by the managers of the New York State Lunatic Asylum, located at Utica, and would shortly remove there.

Notwithstanding the faithful performance of his duties, and a wise regulation of the institution, both required that his time should be devoted exclusively to the Retreat, his former patrons continued to feel that he was still within reach, and in an emergency could be consulted, and hence felt less keenly than they otherwise would the trial of separation. When, however, it was ascertained that he was to leave the place altogether, and his lot from henceforth to be cast in a neighboring State indeed, but at a distance too great for ready access, there were many and sincere regrets expressed by those who had experienced, in seasons of sickness and suffering, his tender sympathy and superior skill.

His office and duties as superintendent and physician at the Retreat at Hartford terminated about the first of October, 1842, and from that time forth he became identified with the institution at Utica, to which he gave every thought, and all his energy of soul; his hearty devotion to it only terminating with his life, which appropriately closed within its walls, amidst

the scene of his untiring labors and proud success. For this position may be justly claimed for him the possession, in a superior degree, of every quality requisite in a physician-in-chief. The native vigor and practical character of his mind; a training in that sober school in which every pupil is made to feel daily that there is no hope or chance for honors or rewards aside from well-directed personal efforts; that reflective self-reliance, equally removed from rashness and timidity, which we see early characterized his movements; his varied attainments, his extensive, thorough knowledge of men, his great and systematic industry, his practical experience of the peculiar wants and treatment of the insane,—all served, we repeat, to make him one of the foremost in the wide field of labor to which, with redoubled earnestness, he had once more and anew dedicated himself. The walls only of the noble structure which now does honor even to the great State of New York, and which was destined to give an enduring reputation to our subject, were at that time erected; the internal arrangements and furnishing awaiting, for the most part, the direction of the superintendent. Though the original plan contemplated accommodations for a thousand patients, with their officers and attendants, it had, previously to this period, been decided to carry out but partially the design, and provide for about half this number. Indeed, at this time the centre building and main wings only were erected, and nothing had been done toward laying out the grounds, or constructing the necessary out-buildings. Here, therefore, the scope of his duties demanded his attention without as well as within the establishment. To plan and carry out the design of the institution to its completion,—to arrange and organize all its different departments, wading through the mass of details requisite in order that the security, comfort, and convenience of all should be best consulted, was a work of great magnitude, and its thorough accomplishment of incalculable importance. To this work Dr. Brigham brought what was required, not only sound, practical common sense, but a previous and well-improved experience, to which was united a correct estimate of the value of money, and the best method

of making the most of it; or, in other words, an enlightened, intelligent economy.

Elevated, then, to this new and truly exalted position, the problem just suggested was given him to solve. How correctly it was wrought out must be left to the decision of those who have entered upon his labors, and have had in experience the benefit of his judgment. For myself, I do not doubt that his comprehensive mind grasped readily the entire details of his plans, while yet they existed only in his own brain, and that he clearly saw at the outset the work as it stood when completed, and justly estimated its practical operation. I infer this both from my knowledge of the man, and from the qualifications with which his previous observations and experience had endowed him. Though many improvements in ventilating, warming, and lighting public buildings have been brought into successful operation since that period, which, had they then been known, would doubtless have been adopted,—improvements which unquestionably might have produced greater results,—still we are well assured that his ideas, as embodied in his labors, were quite equal with, if not in advance of, the knowledge of that day.

As the governing head of such an institution, he was fitted, as we have heretofore observed, by the possession of those qualities of mind and heart, both natural and acquired, which enabled him to secure the confidence, win the respect, and insure the control, so far as might be requisite, of all those, whatever their position, who constituted his household. His patients respected him as a man, confided in him as a physician, and in many instances entertained for him sentiments of sincere and lasting friendship. Toward attendants and subordinates he was kind and just, but decided. That rigid, yet most excellent code of by-laws which he drew up soon after the opening of the institution at Utica, were laws for all, for himself as well as others; and no one of them could be broken or infringed with impunity. At Hartford this was equally true, and it secured for him the invaluable services of a competent and faithful corps of assistants. Of the operation of this code it

will be sufficient that I quote the following opinion, expressed, some two or three years subsequent to a visit to this Asylum, by the late James Cowles Pritchard, himself at the time in charge of one of the largest of the English institutions for the insane, and also the author of one of the ablest treatises on insanity and diseases of the mind extant in our language; in a word, one of the most competent of judges. To a gentleman making the tour of Europe, principally for the purpose of examining the condition and mode of conducting similar institutions, he said: "*I can show you nothing here that will compare with your own well-ordered Asylum at Utica.*" No medical superintendent ever exhibited greater fertility of invention in providing occupations and amusements suited to the wants of the inmates of institutions of this class, or was more keenly alive to their importance.

As to the moral and purely medical treatment of insanity, Dr. Brigham's views differed in nothing essential from those usually prevailing among physicians engaged in the care and management of the insane. While he occasionally tried remedies comparatively new, his usual practice was to employ a few agents of well-known and established character discriminatingly, and in moderation as to quantity; governed however, in this respect, by the exigencies of each case as it came under his notice. Though he had abundant confidence in the efficacy of medicine appropriately employed, he had also great confidence in the recuperative power of nature, wisely assisted by medicine as occasion required.

Not satisfied with superintending to its completion in all its details the great institution of which he had charge, and subsequently conducting its numerous and weighty affairs, he voluntarily undertook the publication and editorship of the "*Journal of Insanity*," a quarterly of upwards of one hundred pages, the object of which was, as its name imports, to present a medium for whatever of value relating to this specialty he, in connection with his co-laborers in this field, could furnish. The intention was laudable, doubtless, yet, under the circumstances of his precarious health, hardly to be considered as wise or judicious,

as it would require an outlay of time and strength, already engrossed in the discharge of his immediate duties to the institution.

However, it was begun in 1844, the first number being issued in July of that year, from which time onward, until the completion of the fifth volume, he continued in charge of it. Indeed, the first number of the following year contains one or more articles prepared by him, as also the miscellaneous matter; while the succeeding one, that for October, contains his obituary.

Whatever may be said of the wisdom of his undertaking a work of this character, all things considered, it is not to be doubted that the design was a good one, and has resulted in bringing the subject of insanity in all its aspects more fully before the public than would in any other way have been possible; making known, extensively, many valuable facts, and forming a medium for the full discussion of many important subjects. It was most natural that a mind so practical as his, so fully stored with information on his favorite branch, and feeling also so keenly as he did the importance of spreading abroad everywhere this knowledge, should have suggested the method which was adopted for accomplishing his object, and, therefore, that he became the founder of this department of periodical literature in this country. That it accomplished much good, and answered the expectations of Dr. Brigham is evident, whether we regard its intrinsic merits, the extent of its circulation, or the fact that it continues still to disseminate, without essential change in design or purpose, the important information it was established to promulgate.

When, now, we contemplate our subject as the head of an institution having more than five hundred persons constantly to direct and control, a large proportion of them bereft of reason, and requiring the most watchful professional care; looking not only after the great interests of his household, as it was his duty to do, but also to many minor matters, which it was his infirmity that he could not delegate to other parties; conducting a large correspondence, not only with the friends of patients,

but also with the State government, and having, moreover, the responsibility of editing and publishing the *Journal of Insanity*, continually resting upon his mind, we behold a man struggling beneath a burden, in part self-imposed, it is true, but quite too great for the strongest long to sustain.

It was, therefore, without surprise that we find in a journal which he kept—not a very good plan by the way—relating to his health, the following, dated April 28th, 1845: “I have for nearly three years been unwell with pain and swelling of my left knee, but of late I have been chiefly troubled with pain of the right side, just below and under the ribs. A swelling is there, round like a goose egg, movable, without pain, and can be pressed under the ribs and not felt.”

This tumor, which created much apprehension in his own mind, was regarded by Dr. Rogers and Dr. Delafield, of New York, whom he consulted during the November following, as caused by impacted feces, accompanied by thickening of the walls of the intestine. All this time, however, his bodily health was feeble, appetite variable, and generally small. It was about the middle of the summer of 1846 when he first began to suffer from “dizzy turns,” and would awake in the morning too giddy to rise. This vertigo generally yielded somewhat to a laxative, sometimes to stimulants, and would occasionally go off of itself. This symptom continued urgent during the winter of 1846–7, so much so that, at times, he says, “it seemed as if I should have a fit.” With health variable, indeed, but constantly feeble, he continued in the discharge of his duties until the last of July, 1847, when he was attacked with dysentery; which, though early relieved, left the bowels weak and irritable.

During this and the previous year his labors had been augmented, in consequence of his having been required to attend courts, at Binghamton, Auburn, New York City, Northampton, and elsewhere, in cases where the plea of insanity was set up, and his opinion as an expert demanded. It is not probable, however, that his health suffered from this, the change, and relief from other duties for the time being, acting as a soothing and grateful stimulus to his exhausted nervous system. His diges-

tive organs continuing to grow weaker, his bowels on several occasions to give evidence of excessive irritability, and his general health still further to fail, it was deemed indispensable, both by himself and others, that he should withdraw for a season from the care of the institution, and seek, by the relief which it was hoped that this, in connection with change of climate, would afford, a return of that strength and health for which he had so long been striving in vain. He accordingly left Utica on the 17th of February, 1848, in company with two esteemed friends, managers of the Asylum, and made the circuit of the southern portion of the United States, proceeding south on the Atlantic coast, and returning, during the latter part of the succeeding April, by the Mississippi and Ohio Rivers.

On this journey, of which he left copious notes, he made it a part of his duty, as would naturally be expected, to visit most, if not all of the institutions for the insane along the route; publishing, in the *Journal of Insanity* of the succeeding July, such remarks in relation to them, and other objects of interest which he met with, as seemed appropriate.

The principal purpose he had in view in leaving the institution for so long a time—the improvement of his health—seems to have been to a considerable extent realized, for he says, in his journal of July following: “My health has been better since my journey, but still I have the swelling of my side, though it does not trouble me much; my appetite and sleep are pretty good. I feel more as if I might live some years, though heretofore I have not thought so.”

Soon after this record he was called to submit to one of the severest trials which humanity is ever compelled to encounter,—the illness and death of an only son, an interesting and promising boy of twelve years of age. The notes which from time to time were made subsequent to this event not only express, so far as language can, the intensity of his sorrow, but also indicate that its effects, both upon his health and spirits, had more than counterbalanced the benefit which he had derived from his winter's relief from active labor. Easily fatigued by trifling exertions, of whatever nature, with little appetite, dis-

turbed and often unrefreshing sleep, a feeble digestion, attended by symptoms which more than once led him to anticipate an attack of dysentery, he struggled on, attempting to discharge the varied duties which it had so long been his pleasure and ambition to perform, until the month of August following, when dysentery, of which he had so often had premonitions, actually made its appearance. Though well marked, it was not uncommonly severe, nor did it prove, in regard to its more positive and dangerous features, at all rebellious to treatment. Prostration, which his vital powers could not overcome, nor the remedies which were employed successfully resist, soon succeeded, and, as his biographer and medical adviser at that time tells us, he expired without a struggle or a groan, on the morning of the 8th of September, 1849.

In person Dr. Brigham was tall, though somewhat less than six feet in height, and very slender; his weight, in health, probably not exceeding one hundred and thirty pounds. His features were well proportioned, though rather small than otherwise; eyes of a soft blue, expressing more than is usual the varying emotions of the mind. His hair was thin, of a brown color, and slightly, if at all, gray, at the time of his death. His gait was naturally slow, and by no means graceful, while his voice was soft, low, and quite melodious. As a whole, however, his appearance and manner indicated to the observer a superior and cultivated intellect, a firm will, perfect self-possession, a social disposition, a kind and generous heart.

A few remarks relating to his religious character will conclude this sketch; and I approach it with the greater pleasure, as abundant proof is found, in the recorded meditations of Dr. Brigham, both of his religious views and the operations of his mind on this great theme, particularly during the last years of his life.

There can be no doubt, judging from his writings, that, during the earlier part of his life, without being an unbeliever, or even regarding the truths of Christianity with indifference, he was not a pious man. Having a mind at once bold and independent, as well as active and inquisitive, he separated with a

searching, perhaps too searching discrimination, the essentials from the non-essentials, both of a religious creed and a religious life; and while he held the former in sincere respect, treated the latter with an apparent, probably real levity, that touched and wounded the sensibilities of many good people. Such a mental constitution, however, as he possessed, and such views, will account for everything he has written, which at one time occasioned much dissatisfaction, as we have already noticed, and subsequent active opposition to him as the proposed head of a public institution for the insane; and it was his well-known kindness of heart and real benevolence of character, in connection with his many other qualifications for the position, that secured his election, in spite of the remonstrances and votes of some well-meaning but mistaken men.

During the last years of his residence in Hartford, however, it was the opinion of that distinguished philanthropist and good man, the Rev. Thomas H. Gallaudet, who was at the time chaplain at the Retreat, and in the habit of daily and familiar intercourse with Dr. Brigham, that his mind was much and seriously exercised on the subject of religion,—that he habitually read and meditated upon the word of God, and daily engaged in the exercise of private and family devotion,—that, in short, he gave satisfactory evidence of being a Christian; and, after his removal to Utica, the correspondence which was maintained but served to confirm the previously formed opinion of his revered friend. A better, and, indeed, convincing evidence of his deep and humble piety is to be found in quite a large manuscript volume, entitled "Religious Thoughts," which was commenced several years before his death. The writings of Baxter, Doddridge, Hannah More, and others, are often referred to as affording most instructive reading, and much food for profitable reflection, as well as presenting great truths in a strikingly forcible manner. But the Bible, and particularly the writings of the evangelists and apostles, manifestly furnished him the most satisfactory and pleasing topics of thought, and pages of his journal are often devoted to comments upon passages that especially interested him.

Among the many texts which he had selected for special contemplation were the following: "Whosoever shall confess me before men, him will I also confess before my Father which is in heaven."—"Every idle word that men shall speak, they shall give an account thereof in the day of judgment."—"Come unto me, all ye that labor and are heavy laden, and I will give you rest." Breathing forth such sentiments, and with a mind full of thoughts like these, he was preparing himself daily for that rest with the people of God for which he had long and fervently prayed, and at the age of about fifty-one years—an age at which the vigor of the intellect, soundness of the judgment, and the experience of manhood are but matured and perfected, when the strength has not been overtaken and exhausted—exchanged the cares, labors, and responsibilities of life for the quiet and repose of the grave.

His life, as we have seen, had been from its very outset one requiring the active, energetic exercise of every power and faculty, both of mind and body—at first from the necessities of his condition, and subsequently continued, doubtless, partly from the force of habit, but in part, also, from the aspirations of a laudable ambition. It is also unquestionably true that, at the time of his death, he had accomplished, and nobly too, the labors of a long, elevated, and eventful career. Nor is it too much to believe that his name will go down to posterity among that bright galaxy of distinguished men who, self-made, have attained to eminence through the steady, well-directed efforts of sound, well-balanced, and well-informed minds, aided by a strength of will and firmness of purpose which no obstacles could successfully oppose, nor discouragements long depress; a model worthy the imitation of all who would excel in manly gifts, or in the honorable performance of duty among men.

E. K. HUNT.

CHARLES A. LUZENBERG.

1805—1848.

CHARLES ALOYSIUS LUZENBERG was born on the 31st of July, 1805, in the city of Verona, where his father, an Austrian of ancient and respectable family, had followed the army in the capacity of commissary. Soon after this event, his father returned with the army to Alsace, residing with his family alternately at Landau and Weisseberg. At the latter place one of his uncles was established as a practitioner of medicine; a circumstance which, perhaps, gave his father the idea of educating him for that profession.

His earliest tuition was at the public school of Landau, where his precocity first evinced itself, in the rapidity with which he learned arithmetic, and the French and Latin languages. Afterward, when his father moved to Weisseberg, he was received into the city college, at the early age of ten years, being the youngest pupil ever admitted. On account of his attainments, the rules for admission were waived in his favor, and he was held up as a model to the other scholars.

In the year 1819 his father left his native country and settled with his family in Philadelphia, and sparing no expense, sacrificed almost all his means to procure for his eldest son every facility his adopted city could afford for the completion of his studies. True to the German standard of a perfect education, he was taught music, fencing, boxing, and other exercises in gymnastics, and soon acquired the same proficiency in the *athletæ* which he afterwards attained in the medical arena.

In 1825 he attended the lectures of the Jefferson Medical College, and evinced such assiduity and zeal in the acquisition of knowledge, especially in the dissecting rooms, as to furnish, even at that early period, strong indications of his future eminence. Although he made the study of his profession the base-line of his pursuits, he did not neglect to prosecute the departments of classical literature, and especially natural history; which latter he made subsidiary to comparative anatomy, and in this he engaged *con amore*.

At this period, Dr. Physick was in the zenith of his surgical career, and it is presumed gave a bias to the mind of his hospital pupil for his particular department. Hence surgery became his ruling passion; and he spared no trouble or pains, by constant attendance at the Almshouse, or by going almost any distance to witness an important or interesting operation.

In the year 1829, he went to New Orleans, taking with him many most flattering letters, but contenting himself with delivering a single one to Dr. David C. Ker, one of the visiting physicians to the Charity Hospital. On his first visit to that institution, upon the invitation of Dr. Ker, he performed a difficult amputation, in a manner so satisfactory, and so indicative of that courage and genius, which were soon to ripen into maturity, that he was almost upon his arrival, and when scarcely known to the administrators, elected house-surgeon.

In this situation his talents found a field somewhat commensurate with their extent, and which soon brought him a rich harvest of celebrity and reputation.

The abundant opportunities here afforded of witnessing every variety of calamity and casualty to which suffering humanity is subject, and the many emergencies which tasked his judgment, boldness, and address, soon enabled him to acquire those qualities which are found in all great surgeons,—a sure and steady hand, an imperturbable self-possession, and a quick sagacity to seize new indications and employ, at the instant, the means of fulfilling them. These were only some of the evidences of his genius for surgery, which were now developed.

While in the pursuit of surgery, his earliest and his first love,

he was not unmindful of the importance of the other departments of his profession. About this time his attention was attracted to the numerous cases of small-pox which were received into the Charity Hospital. While engaged in the post-mortem examination of a patient who had been some years previously so afflicted with small-pox as to produce deep pits upon the face, Dr. Luzenberg was surprised to find that those parts of the body which had been protected in a great degree from the action of light by clothing were entirely unmarked. Putting this in connection with the fact recorded by Baron Larrey, with which he was doubtless acquainted, as he had read a great deal, viz., that the Egyptians and Arabians were accustomed to cover the exposed parts of small-pox patients with gold leaf, the idea was impressed upon his mind that light was the agent of this phenomenon. Acting upon this impression, he placed a number of patients in an apartment so constructed that the reflective rays of the sun, even at its meridian, could not penetrate within. The result confirmed his opinion, and fully established the position, that the exclusion of light prevents pitting; for all who were discharged cured, exhibited neither pit nor mark upon the face or body, and even such as had the disease in its worst confluent form, passed rapidly and without any difficulty through the maturative and desiccating stages, and recovered with comparatively none of those marks and disgusting discolorations which so signally disfigure the subjects of this most loathsome disorder. Thus satisfied of the correctness of his conclusion, he communicated the fact in scientific good faith to the class of young men around him, requesting them to prosecute the subject, with the view of further testing its reliability. One of them made it the subject of a paper, which will be found in the tenth volume, page 119, of the "American Journal of the Medical Sciences," for 1832, and thus attracted the attention of European physicians to the subject, as may be seen in the *Revue Médicale*, for August, 1832. Much acrimonious disputation transpired as to who was the actual discoverer of this method; at which we need not be surprised, when we remember the old adage that "there is

nothing new under the sun." Our own Physick was almost shorn of the eclat of one of his most important surgical discoveries by Dupuytren and Schmalkalken; and like him, if Dr. •Luzenberg did not first bring into notice the practice of excluding the light in treating variolous disorders, he at all events revived it, and finally got as much credit for it as he deserved; for I well remember when I arrived in Paris, in 1832, that he was pointed out to me at one of the hospitals, by a French student, as an eminent American physician, who had discovered a new mode of treating small-pox.

His reputation soon spread beyond the walls of the Charity Hospital, and a better field was opened for him in private practice, which furnished additional scope for the exertion of all his powers, as well as the gratification of his highest ambition.

In March, 1832, he was married to Mrs. Mary Fort, daughter of the late Henry Clement, of New York. By the ample fortune which was at once, with the most exemplary confidence, placed at his disposal, he was raised to a height whence he could look down with pity upon the rivalries and jealousies of the profession, and in the seclusion of a well-stocked library, and all the appliances for study with which he now supplied himself, shut his ears against the hubbub of his assailants.

More eager now for the acquisition of knowledge than the accumulation of riches, he did not fall into the fatal error of supposing that the distinction he had already acquired entitled him to repose or indolence. He had learned enough—the most important learning—to be conscious of his comparative ignorance, and looking abroad from this new eminence to which he had urged his way, he felt the overpowering conviction that what he had already gained bore but a ratio, eternally decreasing, to what was still contained within the ever expanding horizon of knowledge. Thus did he determine to avail himself of his acquirements in the languages, to collect materials in Europe to erect the superstructure, for which he conceived he had but as yet laid the foundation.

He accordingly, on the 2d May, 1832, left New Orleans, accompanied by his family. He went by way of the West, with

a view of first acquainting himself with the features of his own country, and sailed from New York on the 1st of July following for Liverpool. Making excursions through England, Scotland, and Ireland, and taking notes of everything remarkable in these interesting countries, especially in the line of his profession, he next passed over into France, and spent the ensuing winter in Paris. Here he luxuriated in hospitals, schools of medicine, natural history, and the arts, and with a kind of peripatetic study, enriched his mind with all the valuable discoveries in science and art, for which the capital of France is so famous.

Partaking of the same industry which is manifested by the medical, scientific, and literary men at Paris, and which is wholly unknown in this country, he was with the professors and students before daylight in the morning, with taper in hand, pressing through the crowd at the bedside of the sick and diseased, or assisting at the material clinique of some illustrious professor. Hurrying from one hospital to another, he might be found at a more advanced hour of the day on the benches of the *École de Médecine*, or at some other of the numerous colleges, academies, or gardens of natural history, hearing, seeing, feeling, and comparing all the multiplied and varied sources of spreading knowledge. The day was not long enough. The same enthusiasm carried him by night to the dissecting rooms and operating courses, hardly leaving him time to eat, drink, or sleep.

Thus he passed the whole winter in Paris, visiting, successively, the Hôtel Dieu, la Charité, la Pitié, and other institutions, going from one master to another, discussing all the opinions, ancient and modern, seeing all the methods, and preparing himself to shed a new lustre upon American medicine.

But it was chiefly at the unrivalled clinique of Dupuytren that he passed most of his time. Who has seen the Autocrat of the Hôtel Dieu, in green coat and white apron, treading with measured steps at the head of his crowded class, through the vast *salles* of his surgical empire, with his redoubtable looks and regal dignity, putting bluntly a few questions to each patient as he passes on, so pertinent as to draw forth

as prompt a response, without being fascinated by the power and omnipotence of his strong mind? But it was not for this ascendancy and domination that Dr. Luzenberg admired the *chirurgien en chef*; on the contrary, no one condemned more than he did his stern and despotic severity. It was for his wonderful acumen and diagnostic foresight, his oracular decision based upon scientific deduction, and the admirable forecast with which he modified general methods of practice according to particular individual cases, that he yielded to him the homage due to extraordinary merit. I have often heard him say that he would not give one morning's visit to the Hôtel Dieu for one whole year's knowledge that can be got from books. This is a high, but by no means exaggerated estimate.

Besides having been a perfect and finished operator, the Baron Dupuytren possessed a talent for clinical instruction that never was and never can, I think, be equalled. To have seen him give an apparently superficial glance at a patient, one would have believed the case to be a very simple one, or at all events to possess few points of interest; but arrived in the amphitheatre, he would overwhelm you with a crowd of interesting circumstances, discuss them with his peculiar method and spirit of order, and expose the perilous intricacies of the case with as much precision and perspicuity as if he had weighed and elaborated them in the silence of his study. So, likewise, when he performed an operation, he showed, after it was over, and the patient removed, how thoroughly he had comprehended its diagnostic problem, and deliberated before proceeding to the *dernier resort*, although for all this but a few moments were required. In addition to these brilliant qualities, "the first surgeon of the king" possessed what was still more important in a clinical lecturer,—an inexhaustible fund of practical reflections of the highest interest, which a talent for extemporaneous speaking, and a command of words, resulting from his knowledge of the languages, enabled him to impart in a diction so pure and elegant as actually to serve as a lesson in elocution to the students. I shall never forget the satisfaction Dr. Luzenberg expressed at an incident, which

confirmed his opinion of the value and importance of a thorough knowledge of the dead languages, to render a physician's preparatory education complete, and to admit him into the great catholic communion and fellowship of scholars throughout all ages and all nations.

It was during one of those unlooked for occurrences in the operating amphitheatre, which exemplified all the resources of his genius, that M. Dupuytren addressed himself to a German student who had stepped forward from the first bench, directing him how to assist him. The young man hesitated, and replied in Latin that he did not understand the French language. Never disconcerted, M. Dupuytren readily explained himself in Latin, and the brilliant operation was soon concluded.

I have thus dwelt upon the splendid qualifications of M. Dupuytren, because he embodied the beau ideal of professional eminence, which Dr. Luzenberg had set up in his own mind for future attainment, in a higher degree than any other of the living surgeons of the day, and presented in his qualities, like the artist in the statue of Praxiteles, the aggregated excellencies of the partial and subordinate, but highly meritorious worth around him. To this standard of excellence he modelled all his future efforts, and worked up to it unceasingly with a pre-determined resolution. Not that it was in the nature of Dr. Luzenberg, gifted as he was with a lofty, independent, and capacious intellect, to seek for and depend upon foreign resources; for his whole life in medicine, as in everything else, was a practical illustration of the motto, *Nullius addictus jurare in verba magistri*; but what I wish to be understood as saying is this, that, in his enthusiastic admiration of M. Dupuytren, he contemplated, like an artist, the nearest approximation to the conception of a standard he had previously formed in his own mind, and which he had assigned to himself as a life-work.

After spending five months in Paris, Dr. Luzenberg proceeded on his travels through Europe, visiting most of the principal cities of Germany, Italy, Prussia, Poland, Holland,

and the Netherlands, and taking copious notes of the hospitals and everything pertaining to medical science, which he at one time had some idea of publishing, but which incessant demands upon his time and attention afterward prevented.

At Göttingen he was much gratified by the attention he received at the hands of the distinguished Langenbeck and Himly, who, it would seem, took especial pains to acquaint him with the mode of their university public lectures, which are delivered gratuitously at the respective houses of each professor and who, likewise, have their hospitals within their own domiciles. The constitution of these seminaries is such as to permit the professor to deliver as many private courses as he pleases, and charge whatever he thinks fit, or can get. Hence result a subdivision of the branches unheard of in our home economy, and a competition and rivalry among the professors, which exert a wholesome reaction among the pupils.

At Cracow he had the satisfaction of meeting with an uncle, who was commander of that portion of the Austrian army stationed in that neighborhood, and who furnished him with a special passport for visiting the wonderful salt mines of Wieliczka.

His range of investigation was not limited to the prosecution of the different branches of medical and chirurgical science, or to attendance at the hospitals and lectures of the most renowned teachers in the world, but to the best acquisitions in medicine he added the study of mineralogy, zoology, botany, and the fine arts; so that when he returned home he brought with him a choice collection of rare and precious specimens, and subsidies in every department of knowledge and art.

He returned to New Orleans in the winter of 1834. As soon as it was known that he had resumed his business, patients, speaking the languages of all nations, flocked to him, and he was soon engaged in an extensive and lucrative practice. Such was the general confidence reposed in his skill, that he was frequently sent for from great distances to perform important operations, or to meet consultations; indeed, this latter mode of medical practice formed for the last ten

years a large share of his daily avocations. On these occasions his conduct was regulated by the nicest sense of professional etiquette, and the established rule of medical ethics. He was scrupulously careful to say nothing in the presence of the patient or friends, which could even in an indirect manner weaken their confidence in the medical attendant. On the contrary, if the physician was a young man of merit or character, he did all in his power to raise him in the estimation of those who employed him.

Upon all occasions he was ready to confer freely with his professional brethren on any subject respecting which they desired his advice or counsel, whether in special relation to themselves and their affairs, or to those under their treatment. Prodigious of his knowledge as he was generous with his money, he assisted largely in the education of many who drew freely from the inexhaustible fountain of his instruction; and among the prominent physicians of New Orleans, there are several who owe their position and success to his liberality and bounty.

Recognizing in all its bearings the force of the maxim, that "every man is a debtor to his profession," he never compromised its dignity by underselling his services, or by competing in the cheapening practice with his younger or less fortunate *confrères*. He always graduated his charges according to the circumstances of the patient and his own valuation of the services he had rendered. Perhaps no contemporary practitioner in the United States ever enjoyed so lucrative a practice, or received larger fees for single cases or operations.

To the poor he devoted two hours every day, from 8 to 10 o'clock, at his office, and cheerfully gave them his advice and experience gratuitously. Nor did his charity stop here. Many are the respectable families in this city, whose slender circumstances scarcely enabled them to live decently apart from his bounty, and who are now mourning for him as their greatest friend, not only in whatever related to their health, but also to their pecuniary well-being. Gratitude, however, was not the object which prompted his disinterested kindness; for this was seldom manifested towards him during life. He

did good for the gratification and reward which every virtuous action carries with it; and could those persons who form their opinions from appearances or hearsay, have been admitted behind the scenes into a nearer and truer view of his real character, they would, instead of doing him more injustice than they have already done, acknowledge that he was possessed of the kindest and softest emotions of which human nature is susceptible. Many instances might be related, did they not infringe upon the sanctity of professional confidence, of his warmest sympathy with the affliction of others; and of the tenderness he evinced for the suffering of such as were compelled by the force of circumstances to submit to his unyielding knife. The consciousness of the benefit which would result, enabled him on these trying occasions to steel his sensibilities into apparent apathy or indifference.

Such were the principles and feelings; thus exalted were the ends, the aims, and the objects, which actuated and guided Dr. Luzenberg through the whole of his professional career. Active and operative in his character, he was unable to restrain from practical application the speculations of his ardent and energetic mind, but was continually devising new schemes for enlarging the sphere of his usefulness, and benefiting the community by every means in his power. Before one year had expired after his return from Europe, he built the Franklin Infirmary, now the Luzenberg Hospital, situated on the Champs Elysées road, so that those whose circumstances prevented them from receiving his advice at their dwellings, might, for a comparatively small amount, share equally with the more opulent the benefit of his skill and experience. It was almost as easy, once the visit made, for one possessed of his quick and perspicacious insight into the causation and nature of disease, as well as powers of rapid analysis, to prescribe for fifty patients, when congregated together, as for one. As he foresaw, the sick and suffering gathered soon in considerable numbers to his Infirmary, and I am informed by Dr. J. H. Lewis, who was the first physician associated with him in this enterprise, that, such was Dr. Luzenberg's popu-

larity at this period, there were seldom less than from eighty to a hundred patients at any one time during his residence at the hospital. To this gentleman I am indebted for much information communicated to me orally respecting Dr. Luzenberg, with whom he was always on the most intimate and friendly terms; some of which, relating to the most important operations he performed, I shall now proceed to relate.

As I have already stated, long before his visit to Europe, Dr. Luzenberg had reaped in the vast field of the Charity Hospital a stock of practical knowledge and experience in the treatment of surgical cases, which had already established his fame as an operator of the first order. There remained but few of the recognized procedures of chirurgical art which he had not mastered. An opportunity offered soon after his return to New Orleans for the further display of his surgical attainments.

It was in the case of an elderly man suffering with a cancer of the parotid gland, which was much enlarged, as may be seen by a painting taken before the operation. The risk and danger attendant upon such a perfect extirpation of this gland, as to preclude the possibility of a recurrence of the disease, is so well known to the profession, that it would be supererogatory in me to point them out. Suffice it to say that the operation was performed in so thorough a manner that the disease never returned, and that the man enjoyed good health for many years afterward.

The following account of this operation is translated from the *Gazette Médicale de Paris*, of the September following:

"M. Jobert reported a case of complete extirpation of the parotid gland, which was transmitted to the Academy by C. A. Luzenberg, M.D., of New Orleans, Louisiana.

"A man, sixty-two years of age, had been affected for twenty years with an enlargement of the parotid gland. About six years prior to this time it began to increase rapidly, and soon acquired the size of a hen's egg; extensive ulceration attacked the summits of the tumor, from which a thin ichorous pus was discharged, and acute lancinating pains were experienced in

the diseased parts; in a word, it manifested all the usual symptoms of a cancerous affection.

"Dr. Luzenberg resolved to extirpate this tumor, and commenced by passing beneath the primitive carotid artery a loose temporary ligature; then, after having circumscribed the cancerous mass by two incisions, he detached it from the deep-seated parts, extending the dissection to so great a depth that both the styloid and mastoid apophyses were fully exposed to view. At this stage of the operation it was easy to see that the entire parotid gland had degenerated into an encephaloid substance. The profuse hemorrhage which supervened towards the close of the operation, rendered it necessary to tighten the ligature which had been cast around the common carotid artery during the first steps of the operation; this promptly arrested the flow of blood.

"MM. Smith, Lisfranc, and the immortal Beclard, have also reported cases of extirpation of the parotid gland. The case of Dr. Luzenberg is no less interesting, since he has described with much clearness and accuracy the volume and nature of the parts removed.

"Resolved, That we return our thanks to the author, and enrol his name on the list of corresponding members of the Academy of Medicine of Paris."

This resolution was adopted by the most learned, impartial, and scientific body of savans in Europe, and was the second instance, as far as I know, Dr. Physick being the first, of this distinguished honor being conferred upon an American. The particulars, as communicated by Dr. Luzenberg, are reported in full in the *Archives Générales de Médecine*.

The next operation, which may be called the capital of his surgical pillar, was the excision of six inches of the ileum. This was a case of strangulated hernia in a man, now alive and in good health, treated jointly by Dr. Lewis and Dr. Luzenberg. Dr. Lewis states that when they cut down to the sac, the intestine was found so completely mortified for the extent of at least half a foot, as to yield under the touch.

With his peculiar quick and comprehensive judgment, which

enabled him to determine instantly the merits of a procedure, when most men would be still hesitating as to what ought to be done, Dr. Luzenberg proceeded, with the assistance and concurrence of Dr. Lewis, to remove all the mortified portion of the gut, and to bring the serous surfaces of the separated ends together by means of stitches, after the manner recommended by Professor Gross, of Philadelphia. The patient was put upon opium treatment, and in thirty-five days the stitches came away and he entirely recovered.

The next triumph in surgery of Dr. Luzenberg which I shall notice, and which I had the gratification myself of witnessing, was the tying of the primitive iliac artery for the cure of an aneurism of the external iliac.

The subject was a mulatto man, about eighteen or twenty years of age, who bore the operation well. The ligature came away in twenty-one days; the anastomotic circulation was gradually established; the tumor became absorbed in due time, and the patient, when last seen, in 1848, was well and hearty.

It would swell the pages of this memoir to an unnecessary extent were I to detail all those multiplied and varied achievements of his knife, which proved a surgical genius not only in expertness of execution, but in the invention of modes of operation. For instance, I have witnessed during my residence in New Orleans another successful extirpation of a sarcomatous parotid, so deeply seated and attached that it was necessary to shave the styloid and mastoid processes of the temporal bone, and ligature the common carotid. Again, I have assisted him in unlocking the jaws, and loosing the tongue, with his scalpel, of a gentleman from Texas, whose mouth was a perfect deformity and firmly closed up, from the bad effects of salivation. These are but instances, I say, of the various operative procedures, the enumeration of which to be complete would fill a volume. There is one class of operations, however, in which Dr. Luzenberg took such particular interest, that I must add a few words on the subject; and that was couching for the cataract. Whether it was that he possessed a pecu-

liar tact in the use of the needle, or that he exercised a rare faculty of prognosis in the cases he undertook, it is certain he seldom, if ever, failed in producing, if not a complete, at least a partial restoration of vision. Many are the once blind in New Orleans who owe to him the recovery of their visual powers after years of obscurity. There is one case in particular, which was published in the journals of the day, of an individual, who, after a total eclipse of light for eight years, caused by cataract, was in the space of one minute repossessed of the full enjoyment of a sense, the loss of which is in itself one of the most dreadful misfortunes that can befall humanity. From all I have seen and gathered, I am disposed to believe that the operation of couching for the cure of cataract was Dr. Luzenberg's *forte*, and that he took special satisfaction in performing it, on account of the rapidly brilliant result, which comported with his ardent and enthusiastic disposition.

No sooner was his Infirmary established on a permanent basis, than Dr. Luzenberg hastened to accomplish his cherished idea of instituting a Medical School. As he was at this period extensively known and appreciated, not only by the members of his own profession, but also by all who cultivated science in general, and enjoying as he likewise did the friendship of the Governor of the State, he had no difficulty at first in carrying out his plans. His colleagues in this enterprise entered upon the preliminary arrangements with similar views, no doubt entertained simultaneously with himself, and from their combined exertions and influence arose the Medical College of Louisiana.

Dr. Luzenberg was chosen Dean, and the first session opened with a class of sixteen matriculated students. The lectures were delivered in the State House, on Canal Street, and the anatomical demonstrations at the Charity Hospital. The chair of anatomy was filled *ad interim*, as well as that of Surgery, of which he was Professor, by Dr. Luzenberg, with his well-known ability and accustomed zeal.

Judging from what I have seen and heard, in conversation,

debate, and argument, Dr. Luzenberg must have been a superior lecturer; for on all occasions he exhibited great powers of reasoning, joined to the charm of a fluent and energetic elocution. In his various discussions before the Medico-Chirurgical Society of Louisiana, he was remarkable for great copiousness of language, and that delicate tact which is appositely resorted to by men of varied learning and distinguished social relations, in keeping up the interest of their hearers.

For reasons which it does not comport with my sense of propriety to discuss in this memoir, but which did not affect his character, Dr. Luzenberg saw fit to withdraw from his chair in the College, and forever after eschewed the society of his then associates.

Untiring in his devotion to every subject connected with his profession, as well as to the medical institutions of the State, and ever active in alleviating the sufferings of humanity, we find him next taking a deep interest in the regulation and internal management of the Charity Hospital, of which he was appointed one of the Administrators by the Legislature. He was elected Vice-President of the institution—in fact, virtually President, the Governor being ex-officio nominally so; an office which he continued to fill with zeal and fidelity during the remainder of his life.

It would have been an impossibility for a thoughtful and energetic man like Dr. Luzenberg, who had consecrated to learning the passion of his youth and the strength of his manhood, and had made even the portion of his life when he travelled a period of more diligent application; now, when his feelings had become regulated by the discipline of philosophy, and his opinions mellowed by meditation and experience, to abstain, so long as the welfare of humanity was the object of his pursuits, from turning to practical purposes the results of his intellectual acquirements, and thus contributing to the interest nearest to his heart.

The repeated recurrence of yellow fever in New Orleans, and the confused and imperfect accounts published concerning

a disease of which so little positive knowledge was as yet established, determined him to make its investigation the subject of a publication, which should be as perfect as the most diligent application of the residue of his natural allotment of life could make it.

Accordingly he set himself to work collecting materials for this object, and I believe there exists no book in any of the languages, having the most remote bearing on yellow fever, which he did not procure. His plan was to have large and accurate plates of every phasis of the disease, somewhat after the manner of M. Pariset, and he had already caused to be painted in oil, as large as life, the most accurate delineations of the *facies*, and other morbid appearances, which are so readily recognized as pathognomonic of yellow fever.

His writings and pathological researches on the subject had reached a voluminous extent at the time of his decease, but still it was far from being completed; nor did he contemplate publishing the work until he had established every fact and assertion to his satisfaction. With his peculiar predilection for the Latin language, the manuscript is in that tongue; but whether he intended to publish it in such classic form is not known to any one.

Never satisfied unless he was incessantly occupied in prosecuting measures which appeared to him best fitted to promote the cultivation of those branches of human knowledge, so necessary for the intellectual improvement of society as well as the progression of his profession in the collateral sciences, we find him, in 1839, becoming the founder of the "Society of Natural History and the Sciences," which was liberally endowed by the Legislature, with full power to create professorships and confer degrees. To the advancement of this institution, of which he was forthwith elected President, he devoted every hour that he could spare from other avocations, or snatch from the time allotted to sleep; and to forward the great objects in view, he was always ready to sacrifice the claims of worldly prudence and self-interest. The rich collec-

tion of specimens in natural history and the natural sciences which he has left behind him, attests his munificence and disinterested exertions in the cause of education.

Believing in the principle of association, so characteristic of our republic, and so potent an agent in the diffusion, as well as in the augmentation, of knowledge, Dr. Luzenberg succeeded at last in consummating a long-projected scheme for uniting his medical friends of the city into a society for the purpose of mutual improvement and the promotion of medical science.

On the 1st April, 1843, a legislative act was passed, incorporating our society, under the title of "The Louisiana Medico-Chirurgical Society," and at its first meeting Dr. Luzenberg was unanimously chosen President.

In the midst of his active life, Dr. Luzenberg's health began to fail suddenly. Although for a considerable time previously he had experienced the most undoubted symptoms of cardiac disease, still he did not suffer to any noticeable degree until about the beginning of the spring of 1848, when actual pain in the præcordial region, together with obstinate and readily excited paroxysms of palpitation and dyspnoea, totally incapacitated him from application to any business whatever. The worst fears of his medical friends were now excited, and their diagnosis confirmed, with an accuracy worthy of the school of Corvisart, by M. Rouanet, of France, recently arrived in New Orleans, who, as was verified by the autopsy, pointed out the precise location and character of the disease. Without any expectation of deriving benefit from travelling or other means, but solely with the view of escaping from the unavoidable molestations incidental to his numerous business relations, Dr. Luzenberg, after experiencing some degree of alleviation from the quiet of a seashore residence, determined at the first approach of summer to sequester himself at the Red Sulphur Springs of Virginia. By the time he reached Cincinnati, however, his malady had made such inroads upon his constitution that he could proceed no further, and here he lingered until the 15th July, 1848.

Dr. Luzenberg was fully prepared for his departure. During the last two years of his life he was on terms of the most intimate friendship with the Rev. F. L. Hawks, who was unremitting in his attention to him in the earlier period of his last illness, and who served greatly, by the aid of his lucid and masterly reasoning, to prepare him for his end.

The obsequies were performed on the 28th July, the day after the arrival of his remains at his residence, by the Rev. Mr. Preston, of Annunciation Church, assisted by the Rev. William Ozanne; and the large concourse of sympathizing friends and acquaintances, who attended and followed on foot to his last resting-place, in the Protestant Cemetery, showed the high and general estimation in which he was held. The Philharmonic Society, of which he was President, appeared in a body as the procession was moving off, and accompanied it, unexpectedly to every one, with strains of the most appropriate and solemn music. But the most affecting part of the ceremony was to witness the children of the Protestant Female Orphan Asylum, to which he had been a number of years the physician, following in the wake, uniformed in the habiliments of mourning. Truly touching was it to observe this testimonial of the fatherless and afflicted to their departed benefactor, which spoke more eloquently than the best-couched eulogy.

During the time occupied in closing up the tomb, appropriate addresses were made to suit the mixed multitude assembled, in the French, English, and German languages, by Alfred Hennen, Esq., and Drs. De Valetti and Mueller.

THOMAS M. LOGAN.

JOSEPH HARTSHORNE.

1779—1850.

ALTHOUGH not a Philadelphian by birth, Dr. Hartshorne early became one by adoption, and was the son of a Philadelphia mother. In that city were spent the fifty years of unfaltering and successful devotion to his calling, as a public and private practitioner of medicine and surgery; and hence, with his name is associated much that is honorable and interesting in the medical reputation and history of Philadelphia. There, too, he married, reared his children to maturity, ended his days and was buried, after a long career of usefulness, which early became one of unusual professional influence and prosperity, although attended at the outset with a full share of discouragements and difficulties.

He was born in Alexandria, Virginia, on the 12th of December, 1779. His father, William Hartshorne, had removed from New Jersey, a short time previous to the commencement of the Revolution. After having married a lady of Philadelphia, Mr. Hartshorne engaged in business as a commission merchant in Alexandria, his residence being at an attractive place named Strawberry Hill in Fairfax County, Virginia, within a short distance of Mount Vernon and some three miles from Alexandria. His ancestors, who were Friends or Quakers, were among the earliest settlers of the Colony of New Jersey, having emigrated to this country on account of religious persecution, from a long-established home in Leicestershire, England. The pioneer of the family, Richard Hartshorne, arrived at the American homestead on the Highlands

of Neversink in 1669; and subsequently, as one of the Proprietaries in association with the Duke of York and William Penn, in 1682, became one of the largest landholders in the Province of East Jersey.

A portion of the estate, including the original seat of the head of the family, is still in the possession of a lineal descendant.

Mr. Hartshorne enjoyed the highest respect and confidence of his adopted fellow-citizens in all of his social and business relations, as was evinced by the bestowal on him of various civil offices of trust. Among these positions, that of Secretary and Treasurer of the Potomac Navigation Company, of which Washington was the founder and president, was perhaps the most distinguished, on account of the nature of the internal improvement enterprise as the first of its kind on this Continent, and a favorite project of the General's, and on account of the intimate association into which it brought him for many years in succession with the Father of his Country.

Joseph was the third son, and but for an accident which had a marked influence upon his habits, would most probably have followed the example of his father in confining himself, at least in early life, to commercial pursuits. Although in other respects of vigorous and active frame, he early increased the interest of his parents in his intellectual progress by a calamity which, at the age of five years, had thrown him upon his mental resources by rendering him a cripple for life. Having been exposed to cold while under the influence of calomel, at the close of an attack of small-pox, his feet were attacked with a deep-seated suppurative inflammation, which was allowed to produce a permanent contraction and flexion of the toes, and consequent incurable deformity and lameness. His inability to engage in the customary sports of boyhood naturally developed an originally sensitive and retiring disposition, and led him to seek the society of those who were older than himself, and to engage in more mature pursuits than those of ordinary boyhood. The loss of the companionship of his more active schoolfellows also, by subjecting him constantly to in-

dependent means of entertainment, strengthened a self-reliant nature, and taught him to find, in a resort to books and to his own reflections and observations, a higher reach of pastime, instead of the more physical enjoyment which his lameness had denied him. His own sad experience, also, doubtless increased his sympathy for the sufferings of his neighbors; and, by interesting him in their various bodily ailments, probably led the way to his subsequent vocation. The first effect, however, was simply on his aspirations as a general student. Gifted with a retentive memory, clear perception, strong reasoning powers, and entire independence of judgment as well as general activity of mind, he devoted himself with energy to the exercises of the Alexandria Academy, at which, under the able direction of its worthy and learned principal, Dr. McGrath, the chaplain and valued friend of Washington, he became a distinguished pupil, and completed his collegiate education. Latin and French were the favorite languages of his early studies; and the familiarity which he often manifested in after years with these, no less than the force and precision with which he wrote and spoke his native tongue, were characteristic of the thoroughness and accuracy of his scholastic training.

Upon leaving the Academy, he entered the counting-house of his father, for the benefit of a business education under the paternal eye, which was deemed of great value to the young men of the neighborhood, on account of the high standing of Mr. Hartshorne, in that part of the State, as a merchant and a man. The good effect of this commercial training was very striking in his prompt, punctual, methodical, and industrious habits, in conducting all his affairs in after life. Without interfering with his inclination for study, it developed his natural aptness for order and precision, and increased the practical turn of mind, which, in spite of a naturally impulsive, and even enthusiastic disposition, eventually became a ruling and invaluable characteristic.

It was at this period, too, that he established the perfect physical health which enabled him to devote himself to an enormous amount of mental and bodily labor, without inter-

mission, throughout a long succession of years. During an interval of nearly forty years, he was not obliged to rest three days in succession on account of sickness or fatigue; and it was a rare thing for him to indulge in a single day's withdrawal from professional labor for purposes of recreation. He was an old man and an invalid before he was willing to absent himself from his post; and even then he was ready to attend to what he regarded as the call of duty, without regard to his own condition, and without thought of compensation, wherever and whenever the claims of friendship or humanity were properly presented to him.

While dividing his time between the warehouse at Alexandria and the flour-mills at Strawberry Hill, he was induced, by the urging of his friends and some members of his family, whose penetration had already suggested his proper calling, to engage in reading works on medicine, with a view to his ultimately becoming a physician. He entered upon this course, however, with great reluctance. Although fond of the study, the prospect of undertaking the practice of the healing art was so distasteful to him that he at first resisted the importunities of his advisers, but was finally persuaded to make the trial, in consideration of his lameness, which was supposed to incapacitate him for more active occupation. He therefore became a regular pupil of Dr. James Kraik, the family physician of Washington, and former surgeon of the Continental Army. Dr. Kraik was the favorite military surgeon and medical adviser and companion of General Washington in all his campaigns, from the ill-fated Braddock's expedition until the close of the Revolutionary War, and possessed, in character and varied experience, unusually valuable qualifications as a private professional teacher. Our young student, however, was destined for a wider field. After one or two years' preliminary reading and practical study with his accomplished preceptor, he was enabled, through the assistance of his uncles, Samuel Coates and Pattison Hartshorne of Philadelphia then influential managers of the Hospital, and of other relatives in that city, to secure an appointment to the post of

Resident Apprentice and Apothecary, then vacant in the Pennsylvania Hospital. He entered this institution on the 27th of July, 1801, and thus commenced his residence and professional career in Philadelphia, about the middle of his twenty-second year. He entered the medical class of the University at the commencement of the succeeding term; and, from that time forward, was assiduously engaged in the practical duties of the Hospital, as well as in the more theoretical occupation of the library and the lecture-room. We have not space to dwell on the reputation of both the schools in which he was so fortunate as to be thus auspiciously established. Nor need we say anything of the importance and value of the teaching he enjoyed, as hospital surgeon under such men as Rush, and Wistar, and Physick, and Barton, who were the physicians and surgeons of the Hospital, and his preceptors in the University. It is enough to say that he soon became warmly interested in the splendid opportunities afforded by his new field of observation, and did not fail to devote his whole time and energies to the mastery of the science and art, the grand object and nature of which he had just begun to comprehend, in their application to the stern realities of life before him. His previous apprehensions and antipathies were soon merged in a higher sense of admiration for the glories of the science, and a determination to unveil its mysteries for the noble purpose of abating the miseries of his fellow-men.

During his five years' term of service, the library and the museum received a large share of his attention. Probably no resident of the institution ever made himself more familiar with the books of the library, or the preparations of the museum than did Dr. Hartshorne, while they continued in his care; and, it is worthy of note, that to him is due the first regular alphabetical catalogue prepared for publication at the Hospital, as is shown by a special vote, in acknowledgment and commendation, which is on record in the minute-book of the Board of Managers.

As he was no mere closet student, however, our librarian was still more diligently engaged in improving his acquaint-

ance with the ravages of disease and injury in the ward and the dead-house, and in advancing his knowledge of anatomy and surgery by the exercises of the dissecting-room. His interest in the study of anatomy and physiology especially attracted the attention of Dr. Caspar Wistar, then the distinguished professor of the former branch; and his proficiency in the Professor's favorite study was probably an influential source of the regard which Dr. Wistar continued to manifest for him in after years.

Dr. Hartshorne justly attached the highest importance to a thorough knowledge of anatomy in all its details and applications; and, in insisting upon it as, with physiology and pathology, the only true and substantial basis on which medical and surgical skill should rest, he was accustomed to attribute much of the confidence he felt in both medical and surgical practice to the familiarity with it acquired by him while a hospital student. Although always willing to listen to authority, and able and ready to give a reason for his own belief and precept, he was too much a student of Nature, and too independent in his habit of thought, not to value above all things in the pursuit of his profession the faculty of observation, and the ability, through a knowledge of healthy manifestations and appearances, to direct this faculty to a useful end.

After some seven years' study, four of which were spent in the Hospital and in attendance on the University courses, he took his degree of Doctor of Medicine. The thesis which he presented on the occasion of his graduation was an experimental one, "On the Influence of the Atmosphere in Respiration." It was published at the time, in accordance with the custom of the day, and copies of it are still extant. Although prepared and written under the press of his numerous duties as senior hospital resident, it gives evidence of literary taste and scholarship; and, as a specimen of original investigation, is indicative of the ability and learning which soon rendered its young author conspicuous among his brethren.

During the last twelve months of his service at the Hospital, he was authorized to take the entire charge of the out-patients

of the institution, in connection with a charity which has since been given up to the City Dispensary. For this purpose he was allowed the use of a horse and gig; and in the course of the year was called to prescribe for seventeen hundred different patients, the record of whose cases is still preserved.

During the latter few months of his residence in the Hospital, also, he engaged in the translation of Desault's Clinical Lectures on Fractures, and had nearly completed his work and secured a number of subscribers for the publication, when he was forestalled by a competitor. This induced him to prepare, at very short notice, an American edition of Boyer's Treatise on Diseases of the Bones, with an original appendix, containing notes of cases and descriptions of some new forms of apparatus; the notes and descriptions being illustrated with several handsome copperplate engravings. This is the only work in the book form with which his name has been connected as author or editor. He was at no time fond of writing for the press, and he soon became too much absorbed in the routine duties of his public and private practice to be able to devote any time, but what was needed for repose in bed, to labors with the pen. The few papers he has contributed are, like his Appendix to the edition of Boyer on the Bones, entirely practical in their character, and intended to announce or elucidate some new or peculiar mode of treatment, which had been successful in his hands. He was in the habit, however, of recording all his important prescriptions from day to day; and briefly noted the cases of interest that occurred to him. Large numbers of memoranda of this kind are to be found throughout his books; but, although interesting, and, to some extent, available, they are not sufficiently connected in themselves to admit of arrangement for the press.

His residence in the Hospital was further distinguished by the introduction of an improved apparatus for the treatment of fractured thigh, which, for efficiency and simplicity, is superior to many that have been presented since. It still holds its ground in many places; and, with the adaptation of more recent modes of applying the extending and counter-

extending bands, may yet be regarded as one of the best forms of splints for the purpose.

We may remark here, that he attached but little importance to the claim of "originality" in the contrivance of instruments and apparatus, or in the minor modifications of treatment; well knowing that the suggestions of practice are so frequently the same to intelligent and ingenious practitioners, that there are few expedients which have not occurred again and again, under the stimulus of necessity, to different individuals; and that very many of the so-called new inventions are to be found among the illustrations of our oldest works. These are the small vanities of the profession, which, in spite of his constant habit of adapting his own means to the particular end in view, without subservience to established rule, he sometimes undervalued in his own case, and disregarded in others. So far did he go with this feeling, that he described his splint for fractured thigh as a modification of that of Boyer, although it was altogether unlike its imaginary model, and only resembled it, in common with Desault's, in treating the fractured limb in the straight position, and in the employment of a leather socket, which he soon afterwards abandoned.

An opportunity having been presented for his embarking on a voyage to Batavia, as surgeon and supercargo of an East India merchantman, he obtained permission to resign his office at the Hospital some six weeks before the expiration of his five years' term of service. The certificate which was given to him on this occasion, after speaking in the most cordial terms of his conduct, during his residence in the institution, as meriting their highest esteem and respect, goes on to say: "In the practical duties of his profession, he has displayed, under the inspection and advice of six of the most eminent physicians of Philadelphia, a skill seldom to be met with in practitioners of his years. From a well-founded confidence in his abilities and fitness for the charge, the care of the out-door patients has been intrusted to him exclusively during the last year of his meritorious services; and the uncommon suc-

cess with which his practice was marked, left us no cause either to regret or to diminish our confidence in him."

This voyage occupied him about ten months, and was very successful in a pecuniary point of view, at the same time that it was advantageous in other respects. He was soon tempted to make a second venture, during which he was absent some fourteen or fifteen months, three of which were spent in a residence at Batavia. The mercantile result of the second voyage was as unfortunate as that of the first had been prosperous; and the surgeon and supercargo returned to his proper position in Philadelphia, a poorer man than when he left it. The lessons and opportunities of the new field, however, were by no means lost. The diseases and accidents of a long East India voyage in the strongly-manned vessels of former days, and the malignant fevers and bowel affections so prevalent in Batavia at that time, afforded him ample professional employment, as well as means of enlarging his medical experience.

Nor was this episode in his professional life without its moral tests. On two different occasions, his integrity and firmness are known to have been severely tried. Once as supercargo, while seeking freight for his ship, he was offered a large consignment of spices, then monopolized by the government of Holland, on terms so advantageous as to manifest the smuggling character of the transaction by which they were obtained. He refused to be a party to a fraud which he could only suspect, and might easily have winked at without fear of exposure; and thus saved his honor at the expense of a certain fortune. The second trial was much more severe, as well as more appropriate to his peculiar mission. During the second voyage home, the master of the ship, a man of courage and ability, but unusually stern and arbitrary, even for those days of ocean despotism, subjected his crew to an allowance and quality of rations which created a serious amount of sickness as well as discontent among the men. Dr. Hartshorne not only refused to justify the captain, but boldly protested against his course, and continued to insist upon a change, until

he had secured it to some extent, although at the cost of his own comfort and liberty throughout the remainder of the voyage. He was banished to the fore-castle, and at one time would have been put in irons, if it had not been for the undisguised sympathy expressed for him by the subordinate officers and men, whose rights he was defending. It may be remarked here that his determined stand against the oppression of these poor mariners was only in accordance with the spirit of his whole after-life, in ministering to the sick and wounded who were confided to his care, and in protecting what he deemed to be their rights and needs, against the negligence or perversity of the attendants and friends. Nurses and patients, of whatever position, well knew that his orders were meant to be obeyed without alteration or delay. He never hesitated to resent the absurd and mischievous intermeddling so common in the sick-room; nor was he much more patient under the infliction of unreasonable and often impertinent catechizing, so often visited upon the doctor under plea of interest in the patient. To the bluntness manifested on these occasions towards irresponsible parties in and out of the sick-room, and to the sternness with which he was apt to rebuke the careless or disobedient, may be attributed much, if not all, of his reputation in many places for roughness and impatience. To the patients themselves he was ever tender and sympathizing, as he was to all who were really in affliction; although he never withheld the truth when it was unequivocally asked for. His own family and old friends, — all, indeed, who knew him best, — felt not the slightest fear either of words or frowns, unless really deserved, and were more likely to expect a warm grasp of the hand, and a benignant smile or hearty laugh, than either.

On reaching Philadelphia once more, he was glad to settle down, and enter permanently upon the practice of his profession. His apothecary's training at the Hospital, and his extensive professional acquaintance, together with the very limited income to be hoped for at that early stage of his career, induced him to engage in partnership with an old friend as a druggist. With this view he opened an apothecary-

cary's shop and physician's office in Market Street above Eighth. A two or three years' trial of this kind of life satisfied him, that, although it was common, at that period, for city practitioners to compound their own prescriptions, as it now is in the rural districts, and the two different callings were not considered incompatible with each other, such a mode of prosecuting his vocation was not suited to his interest or temper. He therefore opened an office alone, within a short distance from his former Hospital home. Here commenced the long struggle which, notwithstanding the difficulties incident to his lameness and to his entire dependence on the receipts of his daily labor, was destined to end so happily to his advantage. The advance was slow, however, and the trial especially hard to one who had never known what it was to want, until he had left his father's house. That father had been reduced by the misfortunes of others in his old age; and although still anxious to aid his favorite son by giving him a home in his native town, in the hope of securing him a practice there, the only answer to his urgent offer was the prompt reply, that the paternal roof was no place for the sons, until they could bring their fortunes with them.

In the year 1813, Dr. Hartshorne was married to Anna Bonsall, eldest daughter of Isaac Bonsall, a prominent minister of the Society of Friends in Philadelphia; and his practice, already quite respectable in medicine and surgery, from that time rapidly increased.

In 1815, he was, without solicitation on his part, unanimously elected one of the surgeons of the Pennsylvania Hospital, he having withdrawn from a canvass for a similar appointment a year or two previously, in favor of Dr. John Syng Dorsey, nephew of Dr. Physick. His colleagues then, and during several years, were Drs. Physick and Dorsey, who already regarded him as a rising competitor for their well-earned fame. This return, in a higher capacity, to the scene of his early exploits, extended his general reputation, and brought him more prominently before the public as a practical surgeon.

Upon the death of Professor Wistar, in 1818, his rising *pro-*

tége succeeded him as attending physician in a large number of respectable families; and he began to be regarded by a considerable party as likely to be a desirable acquisition to the medical faculty of the University, which had just met with so severe a loss in the decease of his distinguished patron. Accordingly, when the chair of Surgery became vacant by the transfer of Dr. Physick to the Professorship of Anatomy in Dr. Wistar's place, Dr. Hartshorne was urged as a candidate therefor, in connection with the accomplished Dr. Thomas T. Hewson, then already popular as a teacher of Surgical and Comparative Anatomy. The canvass by the respective competitors and their advocates was an exciting one, although Dr. Hartshorne took no personal part in it. Dr. Hartshorne and his associate fell short by one vote only of the number that placed the successful candidate, Dr. Gibson, in the station which he so long held in the school; and, as Dr. Evans, from whose excellent memoir we freely quote, remarks: "It is no disparagement to the latter to say, that the strong desire to transplant from a neighboring and rival school one who promised to contribute much to its rising reputation, was, at the time, generally understood to have been the principal cause of Dr. Hartshorne's defeat."

"He has often said," continues Dr. Evans, "that his failure on that occasion was fortunate on many accounts, and that his private practice was immediately and decidedly augmented after it: so much so, that he would never have been willing to perform the duties of the two together, even if the additional patients had been still disposed to seek him." To use his own expressive phrase, he would not have been hampered with the professorship. He was no office-seeker, and averse to mingling in crowds; and hence he not only declined all invitations to public positions which might have extended, what he shrank from, his notoriety, but was rarely seen in the large social gatherings which are so common among the leading professional men of the city, and especially at the houses of the professors of the different medical schools. Although given to individual hospitality with all the warmth of his native

State, and rarely without a guest in his house and at his table, he had no taste for social display, and never engaged in general entertainments. He was, therefore, known to the students only at a distance and in his hospital service; and, although he commanded their respect and confidence, he never sought that personal and social popularity among them which is so important in the relations between the teacher and his pupils. In a more intimate course with them, however, he would not have failed to attach them strongly to him, as he did all those with whom, as private preceptor or consulting medical counsellor, he was brought into association. He was candid and indulgent, always taking and expressing an unaffected interest in young medical men who proved themselves deserving and capable in the discharge of their duties, and ever ready not only to advise them in difficulties, and to protect them from misrepresentation or imposition, but to award them whatever praise their skill or good conduct may have merited.

"In the year 1820" (we resume our quotation from Dr. E.) "our city was visited by the yellow fever; and from that period up to 1830, there was a remarkable prevalence of epidemic diseases. Influenza of an aggravated character, as well as bilious fever in its various forms, visited, at short intervals, most parts of our country; and the city of Philadelphia, with its adjacent districts, repeatedly suffered severely from their inroads. Of the many eminent physicians who, during that time, resided in our city, there was, perhaps, no one more constantly occupied with the duties of his profession, few as much so, as Dr. Hartshorne. The calls upon him, either as attending or as consulting physician, were not only numerous from all parts of the city and districts, but he was constantly resorted to from that section below the city known by the name of 'The Neck,' with the inhabitants of which he had long been extremely popular, as well as from different parts of the neighboring country. In addition to the great amount of business thus heaped upon him, he was frequently consulted through letters by physicians at a greater distance. Some idea may be formed of the extent of his practice at that pe-

riod, from the fact that, during the course of a single autumn, he prescribed for over two hundred and eighty cases of fever alone, nearly all of which were under his personal care and attendance. The constant demand made upon his time by his private practice, rendered it necessary for him to give up his appointment as surgeon in the Hospital, and in 1821 he accordingly sent in his resignation, after a connection with it, as apprentice, resident physician, and attending surgeon, of nearly twelve years."

"It was thus that so many years of Dr. Hartshorne's life were passed; the reputation for skill and experience which he had acquired adding to his multiplied cares, and securing a continual interruption to rest or pleasure. He continued to devote the untiring energies of his powerful and cultivated mind to the duties and responsibilities of a wide-spread practice, never relaxing in the course he had marked out, until the time arrived when he too was obliged to succumb to the inroads of sickness and the shadow of death."

His naturally strong constitution, sustained by an active life in the open air, his strict temperance, his extreme cleanliness of person, and regular mode of life, so far as his professional duties would admit, enabled him to resist the infirmities of age almost entirely, until he had nearly completed his allotted threescore years and ten. He had undergone two very serious mental shocks, at some five years' interval; the one being the loss of his eldest daughter by a rapid consumption, and the other, the for some time uncertain loss at sea of his eldest son. He had also been subject to occasional attacks of biliary obstruction, probably from gall-stones, for several years, but had never been obliged to interrupt his daily avocations. It was not until the autumn of 1848, and especially after the summer and fall of 1849, that he gave evidence of more serious disorder. The cholera epidemic of 1849 subjected him to numerous appeals from old and new patients, notwithstanding that he had previously been largely curtailing the extent of his practice. He became warmly interested in the work, and was once more almost as busily employed as he

had ever been in his best days. While the excitement lasted, he did not appear to suffer; but the close of the season and the cessation of the contest with the pestilence, left him exhausted and fatally diseased. The remaining months of his failing life were but a struggle with inevitable decay, in which the intervals of comparative ease were just long and decided enough to delude him into the effort to go on with his labors, and to answer the calls which were daily made upon him, and often pertinaciously pressed, even in his sick-room, and when he was unable to leave his bed. Thus he dragged on a weary life, with little hope of improvement, and in entire resignation to the change which he knew was rapidly approaching, until the latter end of June, 1850. At this time he determined to leave the city, in order to secure the undisturbed repose which was impossible in his own house; and he had himself carried to the Brandywine Springs, near Wilmington, Delaware, there to spend, in a pure air and perfect retirement, the few days that yet remained to him. At this place, attended by his sons, Drs. Edward and Henry Hartshorne, with the aid of Drs. Shallcross and Goddard, and surrounded by his family, he lingered until the 20th of August, 1850, when he breathed his last, in peace with all men, and in the firm assurance of a better life above, through the salvation which is in Jesus Christ alone.

Having always been, by preference as well as birthright, a member of the religious Society of Friends, now designated as the "Orthodox" denomination, Dr. Hartshorne's spiritual views were in conformity with the principles held by that body, although he attached but little importance to peculiarities of language and dress. When not overwhelmed with care he was fond of social conversation, generally cheerful, and often quite hilarious, yet his mental abstraction would not unfrequently, and especially among strangers, or in the street, render him apparently unconscious of persons and things around him. In this way he would create, on cursory observers, an impression of reserve and taciturnity, which was not his ordinary habit. Still the cast of his mind led him to serious reflection and its kindred reading. He took pleasure in theological dis-

cussion, but not in disputation; and much of the leisure of the latter years of his life was spent in the study of the Bible and its literature, and of standard works on religious belief and experience. Decided in his own views, he was ever willing to listen to those who differed from him, while he strove to live in charity with all.

Few men were more determined or independent than Dr. Hartshorne, when compelled to take an authoritative position under the dictates of his own reason and conscience; and yet, although never shrinking from responsibility, he had no wish to govern others. He never dogmatized; and was so adverse to mere argument, that he generally preferred dropping a subject to disputing over it. "I wish to live in peace and friendship with all mankind, and especially with my professional brethren," was his remark to an old friend, in reference to a controversy then prevailing in medical circles, the subject of which he did not consider worthy of the excitement created by it.

"He was the most scrupulously truthful man," continues the same friend, "I ever knew. On whatever subject Dr. Hartshorne spoke, it never occurred to his auditor that an idea or word could be at variance with his real opinion, or inconsistent with the fact as he understood it. He was content to rely on the simple potency of truth, and always said exactly what he meant, never attempting either to add force to his assertion by artificial emphasis or ornament. There may have appeared, in this singleness of purpose and absence of embellishment, a lack of some of the sophistication, not to say suavity, of polished society. There may have been absent, also, some of the conventional courtesies which are too apt to be used as cloaks, and which, as such, he held in light esteem. But in that just consideration for the persons and opinions of others, in which true politeness consists, and which has the golden rule for its only guide, he was never intentionally deficient, and usually carefully observant.

"Beneath an occasional brusqueness of demeanor, and sometimes, when the occasion perhaps demanded, of actual severity,

there was a large amount of native goodness of heart; and his sympathies were ever in active exercise towards the afflicted, save when the graver duties of his profession called forth the higher and sterner attributes of his mind."

An anecdote occurs to us, which exemplifies the remark just made in a forcible manner. It was related to us by a professional brother, who was then attending with him in the capacity of house-surgeon of the hospital, as he was making a stated visit as attending surgeon. In the course of his routine, he was observed to visit the cell of an old friend and schoolmate, who was confined therein, a raving and unmanageable maniac. He was so overcome by his feelings, that he stood outside the door, weeping like a child, for some minutes, before he was able to regain his self-control; but the moment the door was open, and the physician and patient were confronted with each other, all trace of the recent yearnings and weakness of the heart were gone, and an air of firm and calm authority alone appeared.

In regard to his professional character and standing, we cannot do better than to quote his biographer, Dr. Evans, in the Memoir to which we are already so much indebted:

"We have, perhaps, already said sufficient to give a general outline of Dr. Hartshorne's life and character as a physician; and we may confess that we feel it to be not an easy matter, so to fill up the sketch as to convey a full and correct idea of them to those who were personally unacquainted with him. We may, however, further observe, that no one capable of appreciating such knowledge could be long associated with him, without being convinced of his extensive and exact knowledge of the principles governing the science of medicine; of his diagnostic acumen, and clear perceptions of the changes effected by disease; together with a thorough familiarity with the art of applying, in the most successful manner, those agents most effective in arresting and removing it. Hence, in the sick-room he was distinguished by the facility with which he made himself acquainted with the nature and extent of the case before him, by the exercise of great sagacity, close obser-

vation, and the well-remembered teachings of a large experience; arriving at conclusions which, although not universally correct, because no human judgment is infallible, the event seldom proved to have been erroneous; and having satisfied himself of the character of the malady with which he had to combat, while always moving with great caution, his course was unhesitating, and regulated by principles from which nothing would tempt him to swerve. As a surgeon he was prudent, but never timid, and he was ever anxious to avoid the knife, when he thought it could be safely dispensed with. He was a decided and strong advocate for the use of the lancet; not resorting to it, however, empirically, without reference to the existing state of the constitution, and of the various organs of the body, but always with precise views in its application, and having a distinct and satisfactory reason for its use. He was aware of there being an impression abroad that he had, from habit, carried the use of this powerful remedial agent too far; but, after renewed consideration of the subject in all its bearings, his convictions of the correctness of the course he had pursued were confirmed; and in a conversation held with the writer, a short time previous to the commencement of his last illness, he remarked that, upon a careful review of his extensive practice, he could recall no single case that caused him any regret for having bled in it too freely; but there were many in which he feared he had erred, either by not bleeding in them at all, or having deferred it until it was too late.

“Being solicitous of keeping pace with the progress of medicine, so far as his numerous engagements would permit, he was a constant reader of the medical journals and other publications of the day, gladly availing himself of the thoughts and experience of others. The impulse of his own mind, however, prevented him from circumscribing his reasoning upon the subject, within the limits marked out by the author he was persuading, since, his reliance being chiefly on the deductions of his own mind, whether in agreement or opposition to the opinions of others, he was necessarily prevented from becoming a mere imitator.

"The great confidence which his professional brethren reposed in his judgment was evidenced by the frequency with which they resorted to him for advice in consultation; in the latter part of his life this constituting a large part of his practice. And in this intercourse with other physicians, while he never concealed his sentiments for reasons of policy, or appeared to acquiesce in what he really disapproved, for fear of infringing on the laws of politeness, yet he invariably treated all with candor and becoming deference, and was always ready to listen to whatever was offered in relation to the facts connected, or remedies proposed, in the case.

"Satisfied that, with all his boasted talents and acquired skill, the efforts of man in warding off the approach of death or for restoring health and strength, were unavailing, except as they were rendered effectual by the blessing of the Almighty, he freely acknowledged the obligation resting upon us to make those efforts with reference to their receiving that blessing. But while he thus confessed the limited powers of human agency in the dispensation of life and health, he nevertheless entertained a high estimate of his profession, and regarded it as a noble art, which conferred some of the choicest blessings on mankind; and in proportion to this high estimate was his contempt for and opposition to quackery, in all its phases; and he failed not to speak in the most decided terms of disapprobation of those members admitted within the ranks of the profession who countenanced or who refused to oppose it."

Dr. Hartshorne was elected a member of the Philadelphia Medical Society in 1801; of the American Philosophical Society in 1815; and of the College of Physicians in 1824. He was at one time a frequent attendant of the meetings of these bodies; and, during his student-life especially, was a useful and influential member and officer of the Philadelphia Medical Society.

E. HARTSHORNE.

SAMUEL GEORGE MORTON.

1799—1851.

To write a veritable biography of Samuel George Morton would involve a plagiarism. Others, who have known him well, have written both his history and his eulogy. Those happy in his personal intimacy have told us how earnest was his spirit, with what industry and single-minded truth he fulfilled every duty; they have recounted his early studies; the religious surroundings of his life, which forbade his entrance into the clerical or legal profession; his own idiosyncrasies, which withdrew him from mercantile employments; his early manhood, spent in Europe in gathering the honors of an old-world university; his travels in France and Italy, developing within him the poetical element, and the keen appreciation of the beauties of form, with that nice discrimination of outline and contour, as necessary to him in subsequent studies as to the painter or the sculptor; his return to his native land to engage in active practice; his early devotion to science as a totality, rather than to any specialty, as a means of distinction; the steps which gradually led him to ethnology as a distinct pursuit, and his laborious prosecution of that study, until he built up out of it a world-wide fame as a philosopher.

Others have done justice, in eloquent terms, to his moral attributes. Affectionate companions of his labors have garlanded his tomb with memories of his social and religious character. Faithful to his friends, affectionate in the home-circle, fond of the society of minds of similar direction, he was as good in the quiet every-day relations of life as great in the

wider circle of scientific intercourse. His house was the frequent scene of pleasant reunions of scientific men, and he ever paid homage to the attainments of those engaged in other departments of labor.

But that is but a cold tribute which falls from the pen of a stranger, who has no personal recollections to warm and energize his language. Such is the misfortune of the writer of this sketch, and he turns himself accordingly to that broader view of Morton's life, to which a knowledge of his writings, and a familiarity with the great ideas which constitute the proudest events of his existence, are only necessary. These pages, then, will present, not so much a biography, as an analytical sketch of his doctrines, and a hasty effort to trace out their final results upon the cause of human progress.

But it will be proper to premise, as it were, an almanac of his life, and place on record his achievements.

Samuel George Morton was born in Philadelphia, in January, 1799, was educated in the strictest school of the Quaker sect, and was destined, originally, for commercial pursuits. Revolting at the details of mercantile life, shut out from the bar and the pulpit by his birth and education as a Quaker, he became a student of medicine under Dr. Joseph Parrish, though assisted in his studies by others, among whom was prominent Dr. Richard Harlan, an accomplished teacher of Natural History of that period. In January, 1820, he attained his majority, and received his degree of Doctor of Medicine in March of the same year. Later in the season, he sailed for Europe, and in the spring of 1823 he received his degree at the University of Edinburgh. During his stay on the other side of the Atlantic, he visited France and Italy. In 1824 he returned, and began the practice of medicine in Philadelphia, and at the same time became a prominent member of the Academy of Natural Sciences. In 1839 he was appointed Professor of Anatomy in the Pennsylvania College of Philadelphia, which position he held until 1843. On the 18th of May, 1851, he died.

Such is the brief record which tells the story of the life of

one whose genius has left its impress on the age, and whose teachings are destined still farther to modify and control public opinion, on some of the most important questions of the day. To fill out this sketch, to show wherein lies the true greatness of Morton's life, is the object of this memoir. And, first, let us trace the indications afforded by the character and amount of his various literary productions.

His early career, manifested only a broad, general taste for natural science; the specific branch of research in which he was to become great was not indicated until a later period. Thus, his Edinburgh thesis was upon the subject of pain. On his return from Europe, he presented to the Academy of Natural Sciences a collection of the greenstone rocks of Scotland; in 1827, he published an "Analysis of Tabular Spar from Bucks County;" in the succeeding year, some "Geological Observations." His attention, thus directed to geology, was naturally turned to its Palæontological features; and a long and important series of papers was published by him in Silliman's Journal, or in the Journal of the Academy, on the fossils of the cretaceous formations of the United States. In 1834 these were gathered into a volume, with the title, "Synopsis of the Organic Remains of the Cretaceous Group of the United States."

This book, in itself, might well form the subject of a warm eulogy of its author, but it was only a stepping-stone to higher labors. By a natural progression, comparative anatomy also occupied his attention. In 1831, a paper on some "Parasitic Worms;" in 1841, a description of "An Albino Raccoon;" and in 1844, a memoir "On a supposed new species of Hippopotamus," were published, and still exist as evidences of the breadth of his studies.

Nor was his attention drawn away from his profession by these studies. As author, or editor, he made some valuable additions to American medical literature, in rapid succession. In 1834, he published a laborious work, entitled "Illustrations of Pulmonary Consumption, its Anatomical Characters, Causes, Symptoms, and Treatment;" in 1835, an American

edition, with notes, of "Mackintosh's Principles of Pathology and Practice of Physic;" and in 1839, a text-book of Human Anatomy, under the designation of "An Illustrated System of Human Anatomy, Special, General, and Microscopic."

Many men have built up, and deserved, an enduring medical reputation, on claims to consideration no more ample than these. The anatomical work, especially, is remarkable for the clearness and beauty of its descriptions.

But the true fame of the scholar in natural science is not attained in the mere addition of isolated facts to our general store of knowledge. This is worthy and useful. The pursuit of details may exhibit great perseverance and acumen, but a fact is a dead thing until associated with its surroundings. To group together, to interpret, to generalize, this is the province of the mind having within it the true philosophical element. Thus far in our record of Morton's work, we have seen only the observer, patient, careful, painstaking, and meritorious, but not as yet the parent of any great original idea.

To use the broadest term, it was in his ethnological studies that Morton secured his highest and most permanent reputation. The publication of his "*Crania Americana*," in 1839, and of the "*Crania Egyptiaca*," in 1844, were the result of studies dating back to 1830, and pursued during that long interval with enthusiasm and industry. The one embodied a description of one hundred and fifty-five skulls of Toltec Indians, and of one hundred and sixty-one skulls of the various barbarous tribes of American Indians, including their facial angle, their contour, the relative capacity of different portions of the cranium, and, finally and most important, their internal capacity in cubic inches, ascertained by accurate measurement. Its principal conclusions were, in his own language:

"1st. That the American race differs essentially from all others, not excepting the Mongolian; nor do the feeble analogies of language, and the more obvious ones in civil and religious institutions and the arts, denote anything beyond casual or colonial communications with the Asiatic nations; and even

those analogies may perhaps be accounted for as Humboldt has suggested, in the mere coincidence arising from similar wants and impulses in nations inhabiting similar latitudes.

"2d. That the American nations, excepting the polar tribes, are of one race and one species, but of two great families, which resemble each other in physical, but differ in intellectual character.

"3d. That the cranial remains discovered in the mounds from Peru to Wisconsin, belong to the same race, and probably to the Toltecan family."

"*Crania Egyptiaca*" was a work of similar character, embracing similar observations of a large number of ancient and modern Egyptian skulls, from which similar and equally important conclusions were reached. In the course of these two works, moreover, and in various less pretentious publications, the cranial characteristics of many skulls of different races were examined, including, finally, a sufficiently full measurement of all the leading families, to lead to the grave conclusion, that the events of history and of national conquests have, from the creation of the world, rested as much upon the relative superiority or inferiority of the cranial capacity of nations, as upon those other causes of climate, education, or warlike character, which have heretofore been supposed to govern and control the progress of human events.

It is interesting to recognize the curious fact, that it was in a nominally exhausted science, that of Descriptive Anatomy, that Morton obtained these results.

At that time, when Morton had fairly enlisted as an anatomist, and fixed upon that department of science as his future field of labor, it became a question in what province of anatomy he should apply himself. The attention of students had been for a long time turned away from descriptive anatomy. In comparative anatomy, the labors of Cuvier had developed a grand and comprehensive division of the animated creation, so far-sighted and philosophical that it only remained for his followers to fill up the details: the great plan was already complete. But even here was an inviting task. The fauna of

the New World still needed description and study. The geographical distribution of animals, as well as their geological history, waited for the discoverer of their wonderful relations to the world's progress, relations destined to remain unnoticed, until, at the magic touch of Agassiz, they sprang into a theory, bold, far-reaching, and, in the truest sense of the word, sublime: a theory, like many others, derived from the study of God's works, startlingly at variance with merely human ideas of God's will.

No less deeply hid beneath the myriad superficial forms of comparative anatomy, was the then undeveloped theory of design in the vertebrate creation, of one original pattern, upon which, and its modifications, are built up all those otherwise incomprehensible variations in the vertebrates. True, the genius of Oken had already sent its electric light into this chaos; but with his peculiarly transcendental mind, he had not conferred upon his theory that clearness and precision which would gain it favor with the exact and practical minds who governed public opinion on this subject. Oken, and his fellow-laborer, Spix, were made the butts of ridicule, or mentioned, even by Cuvier himself, with undisguised contempt. "And," says Owen, "even in 1845, the learned and liberal-minded editor of Baron Cuvier's last course of lectures, M. de Saint Agy, commenting upon the osteological essays of Spix and Oken, remarks: 'For my part, "an upper-jaw" is an "upper-jaw," and an "arm" is an "arm"—one must not seek to originate an osteology out of a system of metaphysics.'"

To which Owen very tersely replies: "But a jaw is not the less a jaw because it is a 'hæmapophysis,' nor is an arm the less an arm because it is a 'diverging appendage.' In the same spirit a critic might write: Newton calls this earth a 'planet,' and the moon a 'satellite;' for me the earth is an earth, and the moon is a moon—one must not strive to make an ouvanology out of a system of metaphysics."

Thus it happened that, at the time of which we are writing, the new developments of anatomical research, since known as "transcendental," or "philosophical anatomy," and illustrated

and made clear by the accurate mind of Owen, were not in a favorable position for attracting the notice or enthusiasm of the student. Like the very subject it investigated, its relations to actual, practical science, were as dim and indistinct as those of the complex and stalactitic head of the fish, to the typical vertebra of which it is but a modification.

So by Providence, or accident, it was not in the wide region of comparative anatomy that Morton was destined to shine as a discoverer. The field was wide, its paths inviting, but the subject of our notice trod them only in the footsteps of others who had gone before.

At that time, more than at any other in the history of medicine, the revelations of the microscope conferred upon general anatomy a deep and absorbing interest. Art had perfected the necessary instrument. The human eye—profoundest problem of creative wisdom—had magnified its powers a thousand fold. As the difficulties of distance and magnitude had been overcome by the telescope, so now had the opposite conditions of proximity and minuteness yielded to the art of the cunning optician.

Here beckoned at once the charm of novelty and the forms of beauty, the faultless symmetry and unapproachable perfection which are hidden by nature from the unassisted eye. Here, too, was utility developed, in the added powers to control disease given to us by a deeper knowledge of the tissues it inhabits. And greater attraction than these to the philosophical mind, here was the *cell*, the problem of embryology, the *integer vitæ*. In it lay undiscovered mystery, in it God's deepest design for the preservation and perpetuation of life; beyond it all, the solemn question, "What is life itself?"

Here emulation prompted. Others were eagerly engaged, and honors were rapidly accumulating upon them.

But with Morton, though the head was interested, though he earnestly kept pace with the progress of others, and in the honest discharge of his mission as a physician, suffered no knowledge to escape him, he but profited by the labors of others—his heart was not there.

Only descriptive anatomy was left. We may not tell why it, rather than the other provinces, was chosen. Accident, or whim, often guide the most earnest minds, "by ways which they know not," to results equally unexpected. Looking at the probabilities of acquiring distinction as a philosopher, originator, discoverer in descriptive anatomy, the chances were indeed meagre. Works on the subject abounded, but for a long series of years no one of their authors had laid claim to originality. The most that any hoped for, was a convenient classification, and the high merit of credible and lucid description. Meckel and others, it is true, had, by comparison of many bodies, made known all those variations from the archetype which are liable to occur, and by numerical analysis had taught the surgeon in what proportion of cases he might find this artery varying from its normal distribution, or that one deficient. Others still, as Suichka has since done, might trace a nerve deeper to its origin in the cerebral mass, or track its windings by the microscope to a more distant distribution than that before assigned. All this was useful and honorable, but it was not the work of a comprehensive mind, fitted to grasp the more intricate relations of one department of science to another. And yet this seemed then, as it now does, all that the descriptive anatomist might hope for.

His was an exhausted science—not a point remained unoccupied. From head to foot, from the epidermis to the innermost medullary canal, patient and careful observers had traversed every tissue. Every prominence upon a bone, every curve upon an artery, each sinuous winding of a nerve, and every swelling of a muscle, had been described and named. The mediæval worthies, who, at the revival of learning, had renewed and enlarged the teachings of Hippocrates, Avicenna,* Aristotle, Galen, and Celsus, those later workers, who, after the Harveian discovery, had again reconstructed and completed the labors of Vesalius and his followers, were the only true discoverers in descriptive anatomy. Vieussens, Fallo-

* Abn Sina.

pius, Eustachius, Monro, Malpighi ("incomparable Malpighi"), Steno, Havers, and many others, had perpetuated their names in connection with parts by them first described, until no room seemed left for the modern student.

The chivalry and romance of anatomy had no longer a being. In the day of many of those just named, the study was prosecuted only by the truly brave. All that strong materialistic veneration for the dead human body, which is even now so strong in the multitude, then amounted to such an overwhelming public opinion that an actual bodily danger surrounded the student; and it may be readily supposed that he too was not entirely free from the prejudices of his age.

Under these circumstances of danger, and, if not of superstition, of that heroic triumph over it which is equally exciting, the older anatomists were enthusiasts. In the awed silence of some lonely tower, beneath the antique overhanging lamp, alone with the dread majesty of death, in their dissections those grave old men saw wonders such as the modern dissector cannot see. The scalpel, in their hands, was like the prow of a ship cleaving its way to unknown countries, and the discovery of a new organ came to the sense of the anatomist,

"Welcome as the cry
That told the Indian Isles were nigh
To the world-seeking Genoese;
When the land-wind from fields of balm,
And orange-groves, and woods of palm,
Blew o'er the Haytien seas!"

How changed all this in the nineteenth century! The solemn awe with which the early dissectors prosecuted, in dangerous secrecy, their dread researches into the undiscovered mysteries of dead humanity, has given place to the light song of the boy-student, in the cheerful, well-arranged dissecting room, around which pass the merry jest and rapid repartee, the gay exuberant vitality of youth, in unnoticed proximity to dull, disfigured death!

And yet it was in this exhausted science—these ways of

learning worn by the feet of all that countless multitude who, from century to century, had sought an entrance to the medical profession—that Morton struck out a new avenue to fame, and gained the priceless name of philosopher.

From the time when, in 1830, he failed to procure a sufficient number of skulls to illustrate the cranial forms of the five great races, in an introductory lecture to a class in anatomy, on to the close of his life, he set himself to supply this remarkable deficiency, and to study the forms of the human skull. Gradually his collection grew to a size such as he had not himself anticipated. In every section of the country, and finally in all countries, he found willing and enthusiastic helpers. The Pyramids of Egypt, and the lone burial-ground of the Indian, on that far western coast—

"Where rolls the Oregon, and hears no sound,
Save his own dashing"—

the old Phœnician tombs of Malta, and the temples of the Incas of Peru, alike gave up their dead to his unwearied search.

Time went on. The office of Morton became a "place of skulls." At the time of his death, his collection of human skulls amounted to nearly a thousand specimens, while of mammals, birds, reptiles, and fishes, he had some seven hundred more. With patient toil, with large expense, this gathering of crania was continued for many years, until its result far exceeded that of any other in the world.

The visitor to the Academy of Natural Sciences at Philadelphia, as he paces its long and crowded galleries, will behold the windowed shelves containing these vestiges of humanity. From out the clear glass glares the stony gaze of the Egyptian mummy, the withered, blackened, parchment cheeks of old kings of Peru and priests of the sun-worshippers; lips which breathed music, or uttered prayers three thousand years ago, cling shrivelled to the shrunken gums and glistening teeth. And there are the patched-up heads, the skulls broken and

comminuted to fragments, of brave old knights of the Crusades, and Saracenic opponents. The glittering lance, the flying pennon, the rattling shield, are long since mouldered, rusted, gone to nothingness; the lusty mouth which shouted the war-cry of "Mary, Mother of God," or "Allah-il-Allah," can speak no more of its old history, can tell no tale of the human passions which beat and throbbed in the bony case of that silent skull; but out of it speaks a common humanity, a strong lesson of the permanence of races, the enduring character of national ambitions, and the solemn fact that man, as we see him now in the crowded street, is, after all, but the man of centuries ago. The gradual gathering together of these crania developed in the mind of Morton a taste or passion for the study of Ethnology—the Science of Races—and the noblest study which can, by any possibility, occupy the human intellect. In it lie the deepest problems of God's will to man, out of it shall yet be solved the most intricate questions of man's destiny.

It was a new study. In the eighteenth century, Camper, the original propounder of the theory of the facial angle, had announced the heretical idea of diversity of races. Late in the same century, Blumenbach, of Göttingen, took up the subject, and by the decennial publication of his *Decades Craniorum*, placed himself at the head of ethnologists. His works were made familiar to the English reader by the Lectures of William Lawrence, at the Royal College of Surgeons, in 1819. Before this, however, Mr. Pritchard, the able author of the "Natural History of Man," took the field as an ethnologist in the larger sense of the word, and has ever since been hailed by the clergy, and by biblical scholars, as the champion of their belief.

When Morton returned from his sojourn in Edinburgh, in 1824, Gall and Spurzheim, and their colleagues, had widely promulgated what was then considered the science of phrenology. Great attention was at that time devoted to cranial forms, and though Morton pursued the subject as an ethnologist, he never committed himself to the doctrine of phrenology

as such. In our days, when phrenology ranks with mesmerism and other pseudo-sciences—when it simply constitutes a disreputable means of livelihood for a few beggarly itinerant lecturers—we are apt to forget that Gall and Spurzheim were not the vagabond teachers of the present day; that they were men of reputation, honesty, learning, and varied accomplishment; that their dictum was of itself weighty in the scientific world; and that, therefore, we need feel no surprise, if, on searching the records, we find sound anatomists and able physiologists committed to the doctrines of phrenology. A calm, unprejudiced investigation will show us, even now, that they are based on principles of undisputed correctness; that only in their application—in the absurd mapping out of the cerebrum into territories for the passions and intellect, which, like the States of our own national government, have each a sovereign power, and are each constantly embittered and at war with each other on some question of sectional prejudice—is it really at fault. The division of the head into general regions of intellect and of animal life, is one which forces itself upon the physiologist; that which assigns a thimble-full of brain to one imaginary organ, and a cubic inch to another, that which destroys the unity of the mind, and makes it up of a hundred warring contrarities—which packs organ with organ in the cranium, like so many eggs in a basket, one of which may be addled while the others are sound—is at once unwarranted by anatomy, and disastrous in its reaction upon our ideas of human responsibility.

To return. It cannot be doubted that the active discussion of the phrenological idea had an important influence in directing Morton's mind to the study of craniology. That he never adopted it, is in itself a strong contradiction of the theory. Even at that early period of his studies, he had familiarized himself with the different forms of craniological development, to an extent far beyond the attainment of many who thought themselves deeply versed.

But, fortunately for him, fortunately for science, his investigations were not confined to the crania of a single race.

Grouping together hundreds of skulls, belonging to a single nation, he recognized that, aside from the comparatively trivial individual differences, to which the investigations of phrenology were confined, there existed broad national differences; that, for instance, the skull of the Toltec Indian was an individuality, and could never be mistaken for that of the German, or other of the dominant white races. For awhile his mind was interested in these forms. He noted the cranium of the Indian, with its low, receding forehead, its short antero-posterior diameter, its great breadth between the ears, its flattened occiput, prominent vertex, high cheek-bones, and prominent and ponderous jaws, and compared with it that glorious Grecian form, immortalized in the Apollo Belvidere, but daily seen upon our streets. And so on through other races, he traced a permanent, unchangeable type of form, which dated back to the earliest historic periods. So accurate did he become in assigning nationality to any individual skull, that, in one instance, when a skull, unlike any in his collection, reached him from an unknown source, he unhesitatingly labelled it "Phœnician," and placed it on the shelf. More than a year afterward, he learned that it had been found in an old Phœnician tomb at Malta.

Among other permanent differences which he noticed in skulls, was a difference of size, in comparing nationalities. His mind grasped the great idea which this involved, that not only variety in form, but actual difference in cranial capacity, in the size of the brain itself, was one of the conditions of national greatness. First devising a careful and accurate means of measurement, he subjected all the crania in his collection to the test of capacity, and reached the following results:

The Teutonic family, made up of Germans, English, and Anglo-Americans, had the highest capacity, viz., 92 cubic inches; and that the lowest is assigned to the Hottentots and Australians, viz., 75 inches. Ranging between these two, we have the Celtic, with its 87 inches; the Malays, 85; the Chinese,

82; the African Negro, 83; the barbarous American Indian, 84, and the Toltec Indian, 77.

This, then, is the doctrine. Each of the pure, unmixed races has a cranial capacity and form, which is one of its most marked and permanent conditions. In a word, there is a permanent inequality in the size of the brain of different races of men, and also a variety of shape and contour of the brain-case, which is almost equally marked and descriptive.

Having thus traced the gradual development of this doctrine of a different cranial capacity, we should pause for a moment, and study the bearings of the theory, those tendencies and relations to political economy, which distinguish it from all other discoveries in purely natural science, and which have their only counterpart in the wide-spread influence which geology has had upon religious belief.

It is a marked feature in the grouping and generalizations of modern science, that this sphere of influence is not confined to science alone, but involves those great questions of religion or politics, which come nearer to the passions of men than any mere discovery, however useful. In this way a fearful responsibility is incurred by the teacher in natural science. The memorable onslaught made upon religion by the French encyclopædists, is a familiar instance of the close connection between science and religion, and of the manner in which one may be brought to war upon the other. The still more recent teachings of geology, going to prove the great antiquity of the globe, and the gradual development of one organism into another, without a distinct creative fiat for each race of animals—the historical theories evolved from the deciphering of the hieroglyphics of the Pyramids, and supposed to show a continuous nationality in Egypt back to a period preceding the Noachian deluge—have in turn arrayed the religious against the scientific world.

Morton's doctrines, like these, involved great moral issues; and let them once be widely circulated among the common people, let them be made the topics of newspaper discussion,

and an embroilment would result whose termination no man can foresee.

We do not intend to discuss that effort which has been made, since his death, to array Morton on the side of a diversity of origin of human races. We have many reasons for wishing to avoid this. During his lifetime, he never declared for or against the unity of the races. The doctrine of the diversity of races is not a necessary deduction from his theory. But, more than this, we distrust our own capacity to handle this subject without doing harm. The doctrine mentioned is one involving the most solemn interests. Denying the unity of the human race, it makes a myth of the Adamic curse and fall, and does away with the redemption through Christ, by making it at once unnecessary and insufficient. Able, earnest, and honest minds are at work upon this problem. To them we leave it, and have only thus alluded to it because the fact of a varying cranial capacity in different races, has been strongly urged as one of the arguments for a diverse origin.

For us, the political and social tendencies of Morton's theory have breadth and magnitude enough.

Looking first at the broad fact, so amply established by Morton, that different races have a different cranial capacity, the mind seeks naturally for those influences which such a difference might be supposed to produce upon the political and social conditions of different races. Is it accident, or is it a great providential design, looking toward the ultimate perfection of humanity? Shall all our cherished notions of liberty, equality, fraternity, be crushed beneath the one inexorable fact of unequal brain, coupled with unequal mental power?

The fact may as well exist in scientific theory, as in the actual workings of human relations. In looking back upon the records of that Providence which dictates the pages of human history, we find one nation always in servitude, another always free,—one particular family gradually over-spreads the temperate zone; before it perish all other kindred, tribes, and tongues. The fact, inevitable as death, is there,

however disagreeable to the kindly, generous doctrine of social equality.

Let us not argue that the doctrine of human equality, the right of each member of the human race to equal privileges, is, in itself, as just as it is generous, or as truthful as it is kindly. The problem of government is not to be solved by asserting the dignity of human nature, *per se*, for all history and all analogy contradict it. In history, we find that, so far as the welfare of nations is concerned, there is no such thing as equality; that the strong hand, guided by the intelligent brain, has ever conquered; and through so many apparent variations, so many momentary defeats resulting in permanent victories, has this held true, that, however false the assertion "Might makes right" may be, so far as ends merely human are concerned, nevertheless, the Divine Will attains its purposes through Might as the means, and makes the feeble Right the temporary victim. Human crimes, as well as human virtues, work out the fiats of the Almighty; and all things, great and small, willing or unwilling, do serve Him.

We need not travel from our own continent to find the history of a series of races which will illustrate with sufficient fulness the influence of a single anatomical fact upon national success.

"Human history," says Dr. Robert Knox, "cannot be a mere chapter of accidents. The fate of nations cannot be always regulated by chance; its literature, science, art, wealth, religion, language, laws, and morals, cannot surely be the result of mere accidental circumstances."

The monumental history, as well as the traditions of the aborigines of our country, indicates that the Toltecan or Peruvian was once the dominant race of this continent. As described by Cortez and his followers, they were a gentle people, of fixed habits, given to assembling in large communities, and the building of great cities. The arts of civilization existed among them to a great extent. A monarchical government, a priestly hierarchy, and a provident agriculture indicated a

condition far above barbarism. Their average cranial capacity, as ascertained by Morton, from the measurement of two hundred and thirteen skulls, was seventy-seven cubic inches. Its conformation presented a low receding forehead, the longitudinal and parietal diameter nearly equal, a flattened occiput, high cheek bones, and heavy and projecting jaws. This race once held possession from the great lakes to the Isthmus of Darien. It was they who constructed the forts and mounds which dot our western prairies. But long before the peopling of North America by the whites, they had disappeared from the whole country north of the Rio Grande; and their place was occupied by a race superior to them in cranial development, but inferior in the arts. The barbarous tribes had some seven cubic inches of brain the advantage over the Toltecs. The cranial conformation was similar, with the exception of a fuller occiput, and smaller intellectual lobe. These anatomical characters found an analogy in their minds. Crafty, subtle, vindictive, nomadic, despising manual labor, and incapable of civilization, they were still permitted, in the providence of God, to drive before them the mild Toltec, and give to rapine and blood the land which once waved with corn. It was the manifest destiny of the Toltec race to perish from the earth. Their civilization, their knowledge of fortification and defence, were no match for the larger brain of the red man. The men of largest brain, of strongest will, fiercest animal passions, and smallest share of human sympathies, passed from their northeastern origin, and swept all obstacles from their path. It was a work of annihilation, and nothing was left of the Toltec but his forts and mounds.

The second act in this great drama opens with the most important and immense migration of the human race on record. There came to the shores of New England and Virginia some feeble bands of men, who, whether rightfully or not, were soon engaged in bloody wars with the numerous tribes around them. Looking at the probabilities as they then existed, the chances were a thousand to one that, a broil

once commenced between the white and the red man, the former would soon be driven from the shores of the continent, or find a grave beneath its forests. They had to contend with a race numerous, powerful, vindictive, armed with efficient weapons, and the bravery to use them. Why is it, then, that we have seen the Teuton gradually enlarging his borders, and the red man as steadily perishing before him? The work is like that which the Indian had previously inflicted on the Toltecan. It was not conquest or subjection, but annihilation. Rank by rank, and tribe by tribe, the red man faded from his possessions. Like some Sarsar wind of death, the races of the Teuton have passed from the portals of the East, until now the golden shores of the Pacific acknowledge their dominion. It mattered little what means were chosen to accomplish this result. The peaceful policy of William Penn, and the stern unyielding integrity of the Puritans, were as fatal to the Indian as the fierce slaughter of the Spaniards in the halls of Montezuma. And the high necessities of civilization were but a secondary element in this contest. On the whole line of advance, from the Bay of Massachusetts to the Gulf of Mexico, the progress of the white race was preceded and pioneered by a class of adventurers who fled from the life of towns, and assimilated themselves to barbarism. It was not for civilization that the Daniel Boones of our country fought and struggled. They contended with the Indian for his hunting-grounds, and not for sites of cities. It was the physiological antipathy of race for race, not sufficiently proximate, and too proud and stubborn to blend.

And here we may pause to notice another marked difference in the conquering races. The Teuton, with an average cranial capacity of ninety-two inches—or if we take the pure English standard of the Puritans, of ninety-six inches, making a capacity of twelve cubic inches above that of the red man,—fought less, and conquered more than did the Spaniards and French at the South, with an average of eighty-four and eighty-seven cubic inches; thus nearly assimilating them to the Barbarous, but not reducing them to the Toltecan measurement. As a

natural consequence, we find that the Teuton has never widely amalgamated with the Indian. The animal passions were too feeble, and the innate pride of birth and connection too high, for such an intermingling. But the converse held true with the Spaniard and Frenchman. The Iberian and Celt belong to the swarthy families of the Caucasian race, and are as distinctly separable from the Anglo-Saxon as from the Negro. Possessing as a race five cubic inches less of brain than the Teuton, they more nearly approximate the aborigines than the men of the North. They have everywhere first fought and conquered, and then amalgamated with the Indian. The consequence is a feeble and hybrid race, defining hybridity as a loss of permanence of national type. The physical degeneration which has resulted from this blending, is a very noteworthy feature in anatomical science. The races now inhabiting Mexico are a breed so disgracefully mixed and intermingled, that the types of the heroic Indian, as well as the dignified Spaniard, have alike disappeared. The average size of the head in Mexico is so small, that it is with the greatest difficulty that an American, of average cranial size, can find a native hat sufficiently large.

Still another race comes in to mingle in the confusion of American population. We are indebted to our English forefathers for the presence among us of more than three millions of a low type of human organization,—the Negro. Prognathous jaws, narrow elongated forms, receding foreheads, large posterior development, and an internal capacity of only eighty-three inches, characterize the cranium of the African Negro. The cranial capacity is nine inches less than that of the Teuton, but still exceeding the Toltecan by six inches, and only one less than the Barbarous Indian.

The history of the Negro, not only on the American but the African continent, illustrates the influence of the anatomical on the national conditions.

Although he has never, in his native state, attained to any degree of culture, he is endowed with a wonderful imitative faculty, which enables him to adapt himself to the customs of

civilized life. But we find that he more readily amalgamates with the Indian than with the white. The red man, though he sometimes makes a slave of his black fellow, is still more generally disposed to admit him to a footing of equality. In his relations with the whites, he has now for two centuries remained in servitude, without an effort, on his part, to escape from bondage. The casual flight of a few solitary individuals does not invalidate the fact that he is enchained by a people which could not thus enslave the Indian. The story of Uncle Tom's Cabin contains a most truthful moral on this point, however unconsciously on the part of the author. "George," the almost white slave, strikes for freedom with a bold hand, preferring death to slavery. So, too, did "Cassy," and every other light mulatto in the book. But we find that Mrs. Stowe has always portrayed the pure black as a willing bondsman, and "Uncle Tom," himself, as a model of submission to the lash, and to bitterest wrong and outrage. This was not mere Christian non-resistance. The meekest martyr, from St. Stephen to John Rogers, would have resisted such wrong, by force of arms. It is an inborn characteristic of the black race.

While we may not sanction the idea that the mere fact of inferiority, or diversity, of race, can justify the holding of a fellow-man—for a fellow-man he is—in involuntary servitude, it is nevertheless evident, that the anatomical facts of difference should have some influence in modifying our sentiments, and render us slow in imposing the responsibility of self-support upon a race, whose ability to maintain themselves, in competition with the white man, is at least as much a problem as is that of the coexistence of the Anglo-Saxon and the Indian. It is impossible for eighty-three cubic inches of cerebral matter, fed by negro blood, to compete with ninety-two of educated, Teutonic brain. It is not the province of the anatomist to decide what should be done; but it is safe to assume, that any being, however degraded, if he possess reason and conscience, should also possess the liberty to use them for his own welfare. The limit of authority over a degraded race should not extend

beyond an exercise of paternal care and superior wisdom, in guiding, protecting, and elevating it, in such a manner of life as is best fitted to its capacities.

The amalgamation of the two races produces the mulatto, who manifests a certain degree of hybridity. He is a superior negro, but a very inferior white man. As we go on approximating to the white, we have increasing aptitude to learn, and greater intelligence; but this is accompanied by a corresponding degradation of the white. The mulatto is an unnatural and a sinful existence. Feeble in constitution, unable to perform severe labor, he manifests a tendency to scrofulous disease, and early death. Though the pure negro is naturally long lived, we find the mulatto rarely attaining the verge of old age. It is a notorious fact, that, were it not for constant importations from the South, the race of negroes would soon disappear from the Northern States, from amalgamation, and consequent short life. If amalgamation is thus fatal to the existence of the negro, what better would be his condition if left to his own resources? It is but just that we should look the anatomical argument fairly in the face. The condition of the negro has ever been that of servitude—a consequence of his lack of brains. It cannot be pretended that this should form a justification of American slavery; but the anatomist will still shrink from hastily disturbing the present order of things. An immediate setting free of the bondsmen of the South, would place three and a half millions of an inferior race in competition with one far superior to it in anatomical perfection. Who can doubt where misery would fall? The experiment has already been twice tried on this continent. The Toltecan and the Indian have in turn faded, and passed away from the broad lands they once claimed as their own. Without a claim to the soil, without a vestige of national organization, and in competition with a vastly superior race, that annihilation which has so surely dogged the retreating footsteps of the Indian, would find but a feeble resistance from the humble, crouching African.

One circumstance may, in this contingency, operate in favor

of the negro. Had the Indian been capable of subjection to slavery he would still be found among us. The negro would soon, in freedom, adapt himself somewhat to his new condition; and, although a large class might, like the wretched inhabitants of the British West Indies, prefer abject poverty to labor, yet the influence of a colder climate, and the necessity of providing for a winter, might gradually engraft industrious habits. Even the ever-working bee, when transported to Jamaica, laid up his store of honey for a single season only. Ever after that he forgot his provident Northern notions, and led a roisterous and dissipated life among the sweets of the sugar-houses, unmindful of the morrow.

It is now a received opinion with ethnologists that the large-headed Teuton is the dominant race of all the earth. Wherever climate will permit his existence, his passion for discovery leads him. The negro, the Hindostanee, the Malay, the aborigines of America, have all fallen before him; and now he knocks at the door of the Japanese Mongol, and demands admission there. One by one the lesser tribes have owned his sway. The lively Celt of Ireland has yielded his long-fought battle with the English Teuton; the high-spirited Hungarian, and the wily Italian, feel the yoke of the Austrian Teuton; and throughout the world the race of the great brain is enlarging, by war or by diplomacy, its conquests. Who can tell where or when this immitigable advance shall cease? And what shall be the fate of feeblar nations beneath its sway?

There is no cause for anxiety; for an all-wise Governor controls it. Out of all this seeming wrong cometh good. If the Teuton rob a feeblar race of its possessions, we find that with him go all the arts of civilization,—the power of steam, the blessings of education, the privileges of freedom, and an open Bible. The forests fall, and the ring of the artisan's hammer is heard in cities; and peace smiles upon broad fields of wheat, white for the harvest.

Here, in the broad foundation and the full elaboration of such a theory, we find Morton's true glory. In the most unpromising of all the sciences assigned to the physician, he has

struck out a discovery, from which, as from some wondrous spring, has welled forth a fountain of public opinion, which, starting from the quiet valleys of scientific research, has grown into a torrent as it reaches the vast teeming plain of active human thought. Not in the domain of medicine do its consequences stop, but sweeping resistlessly on, it forms one of the chiefest of those currents of belief which agitate the restless sea of social and political discussion. What though it buries beneath its tide of evidence our preconceived ideas of human liberty, equality, fraternity? Not out of the hopeless selfishness, the inborn depravity, the jealousies, the secret crimes of human hearts, can we contrive a scheme of Providence.

The heaviest burden borne by the truly ambitious medical mind, the great deficiency in the relations of the medical profession towards society, is that it stands at one side of the current of human life, and exerts no direct and palpable influence upon the creeds of men. Those natures which would seek in medicine an opportunity to mingle in the grander competitions of life, and long for fame, in the broad, satisfactory sense of the term, are doomed to disappointment.

Physicians live at one side of the world; they are a separate people, and their mission links them, not to human greatness, but to human weaknesses and sorrows.

But the physician, if, like Morton, he is content to be, rather than to be seen to be, can make his mark upon the world's progress through those avenues wherein natural science is now operating upon creeds of belief and systems of ethics. Like Morton, we may not stand in the hot vanguard of opinion, but, placed calmly in the rear, seeking only for truth without regard to creeds, we may push on the column, and watch the battlements of error, the dogmas of theorists, the nicely-built strongholds of policy, tottering and falling before an impulse which had its origin in the quiet study of the unpretending man of science.

SANFORD B. HUNT.

JOHN B. BECK. ·

1794—1851.

JOHN B. BECK was born September 18, 1794, at Schenectady. He was the third son of Caleb Beck and Catharine Theresa Romeyn, only daughter of Rev. Theodorick Romeyn, D.D., long principal of the Academy of Schenectady, and one of the most active founders of Union College.

While yet a child, Dr. Beck lost his father, and from that period, the care of his education and that of his four brothers, Theodorick Romeyn, Nicholas, Lewis, and Abraham, rested chiefly with his excellent mother. How well this most estimable lady performed her task, was seen not more in the elevated positions which each of her sons attained in their several professions, than in the loving respect which they cherished for their mother. She lived to the advanced age of eighty-five, having survived four of her distinguished sons; and the life thus prolonged, far beyond man's ordinary term, was crowned with "purchased and promised blessings:" her children, and her children's children, to the third and fourth generation, rising up to call her blessed.

At the age of seven years, John left his home to reside with his uncle, Rev. John B. Romeyn, then pastor of the Reformed Dutch Church in Rhinebeck, New York. Here he began his classical studies, and we may not doubt that the fondness which through life he cherished for the learning of the ancients, should be attributed to the fact that his first steps in those studies were guided, and his first advances encouraged, by that ripe scholar and indulgent friend.

In 1804, Dr. Romeyn removed to New York, his nephew accompanying him. Here the young man's education progressed under the same kind and judicious care. In 1809, he entered Columbia College, of which his uncle was then a leading trustee, and the celebrated John M. Mason, D.D., then the leading mind of his profession in the city, was Provost.

Here the industry and ability of young Beck soon secured him the warm approbation, and, in due time, the cordial friendship of Mason. Of the value of their friendship, and especially of the guiding care extended to him throughout his collegiate course, Dr. Beck ever retained a most grateful sense. The result could not be doubtful. His success was worthy of himself, and of the friends whose favor he had won.

In 1813, Beck graduated with the highest honors of his class. He ever retained a kindly feeling for his Alma Mater, and when, in subsequent years, it manifested its appreciation of his general ability, by appointing him one of her Trustees, he took an active part in every effort to sustain and elevate her reputation.

Immediately after his graduation, Dr. Beck accompanied his uncle in a voyage to Europe, and spending some time in London, he there applied himself to the study of Hebrew, under the instruction of the Rev. Mr. Humphries, a grandson of Doddridge. In this study, he made such advances as enabled him, in after-life, to take an intelligent interest in Biblical criticism. On his return from England, having determined to study medicine, he entered the office of Professor David Hosack, of whom he soon became a favorite pupil. It is pleasant now to think that, though the part they respectively took in medical politics soon estranged the able pupil from the distinguished teacher, yet each retained to the end of life, a high estimate of the learning and ability of the other. In 1817, Dr. Beck graduated at the College of Physicians and Surgeons, New York, presenting as his Thesis that treatise on Infanticide, which, subsequently incorporated into the great work on medical jurisprudence by his brother, T. Romeyn Beck, laid the

foundation of his fame as an author. Of this tract, it is no more than literal truth to say that it exhausted the subject, and subsequent writers have done little more than reproduce copies, more or less imperfect, of this, the standard work on Infanticide in the English language.

In 1822, Dr. Beck, in company with Drs. Dyckman and Francis, established the "New York Medical and Physical Journal." To this journal he devoted a large portion of his time, and in it were published many able articles from his pen. Among them may be specially mentioned his paper on Laryngitis, several reviews on the Contagiousness of Yellow Fever, a favorite doctrine of his great teacher, Hosack, and then the leading *questio vexata* of medical science, and others on the Modus Operandi of Medicines, in which the doctrine of their absorption into the blood was ably sustained. Dr. Beck continued as the chief editor of the Medical and Physical Journal for seven years, being associated, in the latter part of that period, with Dr. Peixotto. In 1826, he was elected Professor of Materia Medica and Botany in the College of Physicians and Surgeons, New York, then newly organized, in consequence of the simultaneous resignation of all the previous Faculty. This step, the crowning act of a long series of dissensions, threw upon their successors a weight of responsibility difficult to bear. The names of Post, Hosack, Mitchill, Mott, Macneven, and Francis, were known throughout the country. The whole influence of these names was thrown against the new organization, and it had, in its very inception, to struggle against the imputed odium of having driven those distinguished men from positions they adorned. Of this responsibility, Dr. Beck was prompt to take his full share, and his ability as a controversialist was too well known, and had been too sorely felt, not to insure to him a full share in any odium which the friends of the old, could throw on the leaders of the new organization. But it was not alone against the influence of names that the school had to struggle; active rivalry was soon attempted, and a new medical school, the Rutgers Medical College, was organized, with Hosack, Mott, Macneven, and

Francis, in their old departments, while the places of Post and Mitchill were filled by John D. Godman and Dr. Griscom.

In the struggles which followed, Dr. Beck bore his part nobly, and it is doing no injustice to his distinguished associates to say that no one man did so much in sustaining the College. In his own department he was impregnable; of those, and they were many, who desired that he should fail as a public teacher, few hoped it, and those few were miserably disappointed; his success from the first was signal, and his popularity as a lecturer went on steadily increasing till the close of his career. But it was not alone, though, of course, chiefly, as a public teacher, that Dr. Beck served the College; he was the zealous promoter of its interests, the ready defender of its policy. It is delightful to those who are now connected with the institution, to recall the many, many proofs he gave of unabated interest in the College: next to the ties of kindred were those which bound him to his Medical Alma Mater, and to his life's close, he still delighted to hear of her prosperity, and was ever ready to go beyond his strength in her service. May those to whom her interests are now confided serve her, if with less ability, with equal zeal!

In 1831, Dr. Beck married Anne, eldest daughter of Fanning C. Tucker, Esq., who, with five children, survives him. In 1835, he was appointed one of the Physicians of the New York Hospital, a situation which he filled for ten years, discharging its duties with fidelity and zeal. His services at the Hospital had a very favorable effect on Dr. Beck's reputation as a practitioner. Hitherto, his brethren had known him only as, for his age, a learned physician, a practised and able writer, and a judicious and attractive lecturer. At the Hospital he proved himself no less sagacious in investigating disease at the bedside, than skilful in the application of remedies to its cure. Dr. Beck was, and aimed to be, rather judicious in the use of a few remedies, than able to overwhelm disease by a multitude of them.

While thus applying the fruit of previous study for the relief of the sufferer at this great public charity, he did not

lose the opportunity of giving to the students and young physicians connected with the establishment those clinical lessons which are of such inestimable value. His clinical instruction was, like all his public teaching, distinguished by great simplicity of language, clearness, and a devotion to utility rather than show. In 1843, he collected together, and published in a volume, a few of the most important of his contributions to periodical medical literature.

In 1849, his work on *Infantile Therapeutics* appeared, and was received with the greatest favor, both at home and abroad. Few medical books of its size contain an equal amount of sound learning and practical good sense.

Dr. Beck enjoyed, in an eminent degree, the respect and confidence of his professional brethren. Of this he received continued proofs, from the commencement to the close of his professional life. He was elected, when a very young man, Trustee of the College of Physicians and Surgeons, and Censor of the County Medical Society. He held, at subsequent periods, the offices of Vice-President and President of the County Medical Society, Vice-President and then President of the State Medical Society, before which he delivered an inaugural address on the History of American Medicine before the Revolution, which was afterwards published, and amply sustained his well-earned reputation. He took an earnest interest in the organization of the New York Academy of Medicine, and was early elected one of its Vice-Presidents, and, subsequently, Orator to the Academy. This was the last opportunity his brethren enjoyed of manifesting their unabated respect for him, and regrets, as sincere as general, were felt that his failing health compelled him to decline the duty he would, under more favorable circumstances, have performed with such eminent ability.

About the year 1842, Dr. Beck was attacked with hemorrhage from the bowels, by which he was greatly prostrated. This was repeated at intervals of some months, two or three times, under circumstances which gave his medical friends too much reason to fear that malignant disease was beginning in

some part of the alimentary canal. In 1845, he suffered from a local inflammation, which ran on to an unhealthy suppuration about the angle of the lower jaw: the accumulated purulent matter broke into the pharynx, and some of it finding its way into the stomach, caused an almost uncontrollable vomiting, by which he was so much prostrated as to cause, in the mind of his attendant, apprehensions of an immediate fatal result. From this time Dr. Beck continued an invalid, rallying occasionally, but soon falling off, and only enabled to perform his duties as a practitioner and a public teacher, by the most indomitable strength of will, the most determined purpose not to give it up.

For the last few years of his life he was a martyr to neuralgia and spasmodic disease, from which his sufferings were most intense; still he bore up with almost superhuman resolution, and continued to visit patients and to lecture in the College till the beginning of the session of 1850-51, when he was at last compelled forever to withdraw from the scene of his honorable labors, and the service of an institution, to promote whose interests had been, for so many years, the main object of his professional life.

During the winter of 1850-51, his disease made steady progress, and it became evident that the term of his labors and his sufferings was nigh at hand. These sufferings soon became so intense as to induce his best friends to pray for his early release. He derived at one time some relief from the use of anæsthetics and opiates, but, towards the last, was unwilling to use them. "I do not wish," said he to a medical friend, "to die stupefied or insane."

He desired to look the king of terrors full in the face, and watch with steady eye his slow approach. At length the time of suffering ended, and "the day of his redemption" arrived. On Wednesday, April 9th, at 6 P.M., he died. His funeral, on Friday, April 11th, was attended by almost all the more eminent members of the profession in the city, who vied with each other in manifestations of affection and respect for the deceased. An address, full of genuine feeling and true piety,

was delivered by the Rev. Dr. Knox, an old and highly-valued friend, for whom Dr. Beck had always cherished profound respect.

In a survey of the intellectual character of Dr. Beck, the first quality that deserves especial notice, was *energy*: in this he had few equals; an end being set before him, he pursued it with a vigor, a steadiness of purpose, and a force of will which rarely failed to command success. Another trait, which was very marked in him, was clearness of perception: he saw the object presented to his "mind's eye" with all the distinctness of the most perfect physical vision. This quality was undoubtedly the secret of much of his success as a practitioner of medicine, and a medical writer and public teacher. He saw disease just as it was; theories never distorted, nor did prejudice obscure it: all was clear and perfectly distinct from every other object. Having this quality in so eminent a degree, and being both in English and the classics a thorough scholar, he could not fail, as a teacher, to communicate in words a just and accurate idea of the object before him. So in argument and controversy, he saw the question to be discussed, or the point in dispute clearly; it was perfectly definite to his apprehension, and consequently his arguments neither fell short of, nor flew beyond the point; "*rem acu tetigisti*" is constantly suggested to the mind as we read his arguments.

Dr. Beck's learning was extensive, and eminently accurate. What he knew, he knew precisely and definitely. This, though true in a degree far from common, of his classical, was especially so of his strictly professional learning. The latter took a far wider range, embracing not only the popular authors of our own time and the age immediately preceding us, but also the best writers of bygone days, those venerable classics on whose merits Time has set his seal. Of these authors he was a constant reader, referring to them as the charts by which he was best pleased to sail.

The success of Dr. Beck as a public teacher, has already been noticed. He united in a degree, quite peculiar to him-

self, the qualities often seen apart, that made him both useful and popular. His lectures were clear, precise, and singularly practical: no merely specious theories, no rash generalizations, no loose assertions, found place there; all was logical, accurate, true. These qualities, and the ready courtesy with which, when the lecture was over, he answered the questions and solved the doubts of his pupils, and removed, by repeated and varied illustration—in which he was singularly happy—the difficulties in the way of their perfect comprehension of a subject, gained him a very strong hold on the respect and affections of his pupils, and secured their entire and implicit confidence.

The personal character of Dr. Beck was of a very high order; a steady adherence to principle, an ardent love of truth, an unhesitating, unwavering, almost instinctive preference of the right over the expedient, marked him, in the best and highest sense of the words, as a man of honor; and if, in early life, he manifested, perhaps sometimes too plainly, his disgust at pretension, his abhorrence of fraud, his contempt for meanness, it was but the working of a noble nature, to which such faults were in their very essence alien and abhorrent. Such were some of the characteristics which commended Dr. Beck, as a man and a physician, to the love and admiration of all who knew him.

It is delightful to think that these noble qualities were adorned and harmonized by the graces of a sincere and consistent Christian. Many years before his death, he made public profession of his faith in Christ, and united himself to the Reformed Dutch Church, the church of his forefathers. His life ever after was, so far as human infirmity will allow to any, consistent with his profession.

Of his faith and patience, long and hard trial was made by an illness protracted during many years, and attended by sufferings nearly constant, and often agonizing. So unremitting and so long continued were his pains, that, some months before his death, he said that for five years he had not been free from pain for one single half hour. These pains seemed at

times to have no other limit than the capacity of the system to the sensation of pain. Human nature could endure no more. Yet, through all this, his patient submission to the Divine will failed not for a moment. At length, the measure of his sufferings being full, Death, the gracious messenger, came, but still amid pains indescribable, and set him free. No repinings disturbed the calm serenity of his soul; no doubts dimmed, even for a moment, his clear perception of the Divine benignity. Thus he died.

Oh God, Most Mighty! Oh, Holy and Most Merciful Saviour! suffer us not, at our last hour, for any pains of death, to fall from Thee.

C. R. GILMAN.

DANIEL DRAKE.

1785—1852.

IN preparing a memoir of this distinguished physician, for many years my colleague and intimate friend, I shall avail myself largely of my "Discourse on his Life, Character, and Services," delivered, by request, before the Medical Faculty, Trustees, and students of the University of Louisville, in January, 1853, within a few months after his lamented death. The facts therein stated are founded almost exclusively upon my own knowledge and observation, and I have reason to believe that the portrait which I drew of him was so accurate and life-like, as to meet with the entire approval of his family. Edward D. Mansfield, Esq., in his "Memoir of the Life and Services of Dr. Drake," published at Cincinnati in 1855, refers to the Discourse as "able and faithful," and he has not hesitated to make free use of it, for testimony illustrative of the professional character of our common friend.

Daniel Drake was born at Plainfield, in Essex County, New Jersey, October 20th, 1785. Here he spent the first two years and a half of his life. At the expiration of this time, his father emigrated to Kentucky, then only nine years older than his son, and took up his residence at Mayslick, a new settlement, consisting of a small colony of New Jersey people, with a few stragglers from Virginia and Maryland, whose occupation was clearing the forest and cultivating the soil.

The log cabin of that day, the residence of the Drake family, constituted an interesting feature of the landscape. As the name implies, it was built of logs, generally unhewn,

with a puncheon floor below, and a clapboard floor above, a small square window without glass, a chimney of "cats and clay," and a coarse roof. It consisted generally of one apartment, which served as a sitting-room, dormitory, and kitchen.

The ancestors of Dr. Drake, although poor and illiterate, possessed the great merit of industry, temperance, and piety. Both his grandfathers lived in the very midst of the battle scenes of the Revolution; one of them, Shotwell, was a member of the Society of Friends, and was, of course, a non-combatant, while the other, who had no such scruples, was frequently engaged in the partisan warfare of his native State. The father of Dr. Drake died at Cincinnati in 1882; the mother in 1831; both at an advanced age.

The first fifteen years of young Drake were spent at Mayslick, in the performance of such labors as the exigencies of his family demanded. In the winter months, generally from November until March, he was sent to school, distant about two miles from his father's cabin, while during the remainder of the year he worked upon the farm, attending to the cattle, tilling the soil, and clearing the forest, an occupation in which he always took great delight.

This kind of life, rude as it was, and uncongenial as it must, in the main, have been to his taste, was not without its advantages. It eminently fitted him for the observation of nature, so necessary to a physician. Nothing escaped his eye. Nature was spread out before him in all her diversified forms, and he loved to contemplate her in the majestic forest, in the mighty stream, now placid and now foaming with anger, in the green fields, in the flowers which adorn the valley and the hill, in the clouds, in the lightning and thunder, in the snow and the frost, in the tempest and the hurricane.

It had another effect. While it had the disadvantage of preventing him from pursuing a steady course of literary culture, and fitting him for the early practice of medicine, it excited in him habits of industry and attention to business, teaching him patience and self-reliance, and giving him an

insight into many matters, to which the city trained youth is a stranger.

Finally, the physical labor which he underwent there served to impart health and vigor to his constitution, and thereby contributed to produce that power of endurance which he possessed in a degree superior to that of almost any other man I have ever known.

But the settlement of Mayslick was not without its charms and enjoyments. To the young and imaginative mind of Drake, every little spot in the landscape was invested with peculiar beauty and interest. What to an ordinary observer was barren and unattractive, was to him a source of never-failing gratification. In the spring and summer, the surface of the earth was carpeted with the richest verdure, and embellished with myriads of wild flowers, which, while they rendered the air redolent with fragrance, delighted the eye by their innumerable variety. The trees, those mighty denizens of the forest, were clothed in their most majestic garb, adding beauty and grandeur to the scene, enlivened by the music of birds, which thronged the woods, and constituted, along with the merry and frolicsome squirrel, the familiar companions of the early settler.

The scholastic advantages of young Drake, during his residence here were, as already hinted, very limited. The teachers of the place were itinerants, of the most ordinary description, whose function it was to teach spelling, reading, writing, and ciphering, as far as the rule of three, beyond which few of them were able to go. The fashion in those days was for the whole school to learn and say their lessons aloud; a practice commended by Dr. Drake in after life, as a good exercise of the voice, and as a means of improving the lungs, and disciplining the mind for study in the midst of noise and confusion.

His first teacher was a man from the Eastern Shore of Maryland, an ample exponent of the state of society in that then benighted region. The school-house in which he was educated was fifteen by twenty feet in its dimensions, and one

story high, with a wooden chimney, a puncheon floor, and a door with a latch and string. In the winter, light was admitted through oiled paper, by long openings between the logs. Glass was not to be obtained. The ordinary fee for tuition was fifteen shillings a quarter.

As to the classics, he knew nothing of them until after he began the study of medicine; for the reason, first, that there were no teachers in his neighborhood competent to impart instruction in them, and secondly, that he was too poor to go from home. His father stipulated with his professional preceptor that he should be sent to school for six months to learn Latin; but by some great absurdity, as he observes, this was not done until he had studied for eighteen months that which, for the want of Latin, he could not comprehend. He never, I believe, studied Greek. In after-life he acquired some knowledge of French.

During his sojourn under his father's roof, he was a close observer of the people around him, residents as well as emigrants, the latter of whom were in the habit of passing in great numbers through the settlement. He studied their manners and habits, observed their prejudices, noticed and compared their opinions, and thus acquired important knowledge of human nature. Books and book-learning alone do not serve to make up a man's education; he must mingle with the world, and endeavor to derive from its intercourse those lessons of wisdom and practical tact which are to regulate his conduct and beautify his life.

Thus, it will be seen that his alma mater was the forest; his teacher, nature; his classmates, birds, and squirrels, and wild flowers. Until the commencement of his sixteenth year, when he left home to study medicine, he had never been beyond the confines of the settlement at Mayslick, and it was not until his twentieth year, when he went to Philadelphia to attend lectures, that he saw a large city. The "Queen of the West," as Cincinnati has since been styled, was then a mere hamlet, with hardly a few thousand inhabitants. Kentucky, at that early day, had but one University, and, although

it was hardly fifty miles off, his father was too poor to send him thither.

Young Drake was early destined for the medical profession; and in the autumn of 1800, at the close of his fifteenth year, he was sent to Cincinnati, to Dr. Goforth, as a private pupil. The arrangement was that he should live in his preceptor's family, and that he should remain with him four years, at the end of which he was to be transmuted into a doctor. It was also agreed, between the parties, that he should be sent to school two quarters, that he might learn the Latin language, which, up to that time, he had, as already stated, wholly neglected. For his services and board, the preceptor was to receive four hundred dollars, a tolerably large sum, considering the limited means of his father.

During his pupilage, he performed, with alacrity and fidelity, all the various duties which, at that early period of the West, usually devolved on medical students. His business was not only to study his preceptor's books, but to compound his prescriptions, to attend to the shop or office, and, as he advanced in knowledge, to assist in practice. The first task assigned him was to read Quincy's Dispensatory and grind quicksilver into mercurial ointment; the latter of which, as he quaintly remarks, he found, from previous practice on a Kentucky hand-mill, much the easier of the two. Subsequently, and by degrees, he studied Cheselden on the Bones and Innes on the Muscles, Boerhaave and Van Swieten's Commentaries, Chaptal's Chemistry, Cullen's *Materia Medica*, and Haller's Physiology. These works constituted, at that time, the text-books of medical students, and the custom of many was to commit to memory the greater portion of their contents.

At the close of his studies, he formed a partnership with his preceptor; and, in the autumn of 1805, attended his first course of lectures in the University of Pennsylvania, under Rush, Wistar, Barton, Physick, and Woodhouse. Returning to the West at the termination of the session, he practised medicine

for a year in Mason County, Kentucky, near his former home; and then finally settled at Cincinnati.

In 1807, he married Harriet Sisson, a granddaughter of Col. Jared Mansfield, Surveyor-General of the Northwestern Territory, and afterwards a distinguished Professor in the Military Academy at West Point. This lady possessed elegant manners, unusual personal beauty, and a vigorous understanding. The union was a most congenial and appreciative one; their attachment, founded upon mutual esteem and good deeds, ripened with their years, and by degrees assumed almost a romantic character. In her counsel and sympathy, Dr. Drake found support and consolation in his pecuniary embarrassments, and in many of the other trials of his varied and checkered life. The issue of this union was three children, a son and two daughters, who survive to inherit their parent's good name and reputation. Mrs. Drake died in September, 1825.

He attended his second course of lectures in the University of Pennsylvania, in 1815, and was graduated at the end of the session, with the compliment, from a member of the faculty, of being a young man of great professional promise! It will be seen hereafter that he was then already an author, having published, the preceding autumn, his celebrated "Picture of Cincinnati."

"In May, 1816," says Mr. Mansfield, "he returned to Cincinnati, and immediately recommenced an active and profitable practice. But this was by no means his only employment. His mind was evidently occupied with various ambitious plans,—professional, commercial, and literary,—all of which were successively developed in his after-life, and influenced his character and fortune in various ways." All his mercantile affairs signally failed. In 1814, he was concerned in the drug business; and after his return from Philadelphia, he opened, in conjunction with his father, a dry-goods, hardware, and grocery store, having laid in his supplies after the close of the medical lectures. The spirit of speculation was then rife throughout the West, and it is, therefore, not surprising that

the young and enthusiastic disciple of Æsculapius permitted himself to be drawn a little aside from his legitimate pursuits, in the delusive hope of more rapidly replenishing his empty coffers.

A little over a year after he received his medical degree, he was appointed to the Professorship of *Materia Medica* in the medical department of Transylvania University, at Lexington, and in the following autumn entered upon the discharge of the duties of his chair. His colleagues were Dr. Benjamin W. Dudley, afterwards so distinguished as a teacher and a surgeon, Dr. William H. Richardson, Dr. James Blythe, and Dr. James Overton. The number of students in attendance was twenty, of whom one, at the end of the session, received the honors of the doctorate. Dr. Drake, having completed his course, returned to Cincinnati to resume his practice, and the school was soon after suspended.

In 1819, Dr. Drake founded, at Cincinnati, the Medical College of Ohio, and immediately afterwards organized a faculty, he himself taking the chair of Medicine. A course of lectures was delivered to a small class of students, but misunderstandings soon sprung up, and Dr. Drake was expelled from the school by two of his colleagues, he himself being the presiding officer on the occasion.

Foiled in his attempt to build up a medical institution at home, he was induced, in the autumn of 1823, to re-enter Transylvania University, as an incumbent of the chair which he had vacated six years before. He discharged the duties of this department with rare ability for two years; when, upon the resignation of Dr. Brown, he was transferred to the Professorship of Medicine, which he occupied until 1827, when he finally retired to Cincinnati; the number of pupils, in the meantime, having declined from 282 to 190.

While quietly pursuing his practice, and editing his Journal, Dr. Drake was called, in 1830, to the Professorship of Medicine in the Jefferson College of Philadelphia, then in its infancy, struggling, like a young giant, for a place among the medical schools of the country. Among his colleagues were two gen-

tle men whose reputation, then in a gravescent state, became finally, like his own, coextensive with the American Union. I allude to the late Dr. George McClellan and the late Dr. John Eberle; the one an ingenious and adroit surgeon, the other an able and accomplished physician. Both were excellent teachers of their respective departments, and both, but especially the latter, erudite and successful authors. It is no disparagement to these gentlemen to declare that the backwoodsman not only acquitted himself with great credit, but that, long before the close of the session, he was the most popular professor in the institution. His prelections, I well recollect, created quite a furor among the physicians of the city, as well as among the pupils of the University of Pennsylvania, not a few of whom wandered off, as the hour of their delivery approached, to her young, and then obscure, rival. Eloquence such as his, ready and offhand, had not fallen from the lips of any teacher since the days of Rush. His manner, too, had something about it most winning and attractive; it was full of force, energy, and expression, and could not fail, of itself, to rivet the attention of the dullest intellect, while it was sure to captivate and charm the refined and cultivated.

Why Dr. Drake did not remain in Philadelphia is not now known; but the probability is that he was induced to leave because he found the school not sufficiently remunerative, and because his heart was constantly yearning after his western home. Be this as it may, he resigned his chair early in the spring, and returned to Cincinnati. Previously, however, to doing this, he organized a medical faculty in connection with the Miami University, at Oxford, Ohio. But the scheme, which embraced two of his late Philadelphia colleagues, was not successful, and was finally abandoned before the commencement of the proposed lecture-term, the ensuing autumn.

The medical department of the Miami University was evidently intended as a rival of the Medical College of Ohio, the fortunes of which had long been on the wane. The friends of the latter, perceiving the design, exerted themselves to effect an amalgamation of the two faculties, and so far succeeded as

to draw off a sufficient number of Dr. Drake's adherents to accomplish their object. To Dr. Drake himself was assigned a subordinate department, which, at the end of the session, he vacated, and once more retired to private life.

In the summer of 1835, Dr. Drake conceived the project of organizing the medical department of the Cincinnati College. He had, a short time before, been invited to the chair of Medicine in the Medical College of Ohio, which he had founded sixteen years previously; but believing that it would be impracticable, in the then existing state of things, to place the institution in a flourishing condition, he deemed it his duty to decline the offer, and to enter at once upon the business of establishing a new school. The first course of lectures was delivered the ensuing winter to a class of sixty-six pupils. The faculty consisted of seven members, with Dr. Drake as Professor of Medicine. His colleagues were Dr. L. C. Rives, the late able and popular Professor of Obstetrics in the Medical College of Ohio; Dr. Joseph Nash McDowell, now of the University of Missouri; the late Dr. John P. Harrison, formerly of Louisville, and, after the downfall of the Cincinnati College, a professor in the Medical College of Ohio; the late Dr. James B. Rogers, afterwards Professor of Chemistry in the University of Pennsylvania; and the late Dr. Horatio G. Jameson, a distinguished surgeon of Baltimore, and at one time a professor in the Washington College of that city. To myself was assigned the chair of Pathological Anatomy, at that period the only one of the kind in the United States. At the close of the session Dr. Jameson resigned, and was succeeded by Dr. Willard Parker, the present justly distinguished Professor of Surgery in the College of Physicians and Surgeons of the City of New York.

During the four years the school was in existence it educated nearly four hundred pupils; the last class being nearly double that in the rival institution,—an evidence at once of its popularity, and of the ability and enterprise of its faculty. The school had cost each of the original projectors about four

thousand dollars, nearly the entire amount of the emoluments of their respective chairs during its brief but brilliant career.

Dr. Drake did not long continue idle. The faculty of the Cincinnati College had hardly been disbanded, when he received an invitation from the trustees of the University of Louisville to the chair of Clinical Medicine and Pathological Anatomy.

This chair, created with special reference to him, was not only novel in its character in this country, but it labored under the additional disadvantage of being an "eighth chair;" a circumstance at that time without a precedent in the United States. The anomaly was still further increased by the establishment of an aggregate ticket of one hundred and twenty dollars. It was a bold experiment; but the result showed that those who made it had not acted in the matter unwisely. The new incumbent acquitted himself with great ability; the new chair soon became popular, and the rapid increase of the school fully attested the wisdom and the policy of the new measure, which secured to its faculty a man of such enlarged experience and reputation as a teacher.

Dr. Drake remained in the occupancy of this chair until the spring of 1844, when, on the retirement of Dr. Cooke, he was transferred to the chair of Medicine. He continued to labor in this department with his accustomed zeal and eloquence until the close of the session of 1849; when he sent his resignation to the board of trustees. The winter before he vacated his chair he lectured to four hundred and six pupils, the largest class, up to that time, ever assembled within the walls of any medical institution in the valley of the Mississippi. The prosperity of the University, indeed, could hardly have been greater when he left it, although the number of students was somewhat less than the preceding session, and the utmost harmony prevailed in the faculty. Notwithstanding these circumstances, he deemed it his duty to retire. The reason which he assigned for this step was, that he should, in another year, reach the period of life when, by an act of the board of trustees, a professor became superannuated, and he thought it his duty to

anticipate this law, notwithstanding the framers of it had, when they learned his intentions, abrogated it in his favor.

Soon after his retirement from Louisville, Dr. Drake was invited to the chair of Medicine in the Medical College of Ohio; an appointment which, after some hesitation, he accepted, but which he filled only for one session. Troubles, either real or imaginary, arose during the winter, and at the close of the term he found himself once more without a professor's chair. The introductory lecture which he delivered at the opening of the course is so characteristic of his love for the institution of his founding, and so expressive of his ardent temperament, that I cannot refrain from quoting from it one passage.

After alluding to his connection with various medical institutions, and to the fidelity with which he had served them; to the fact that he had been the first medical pupil in Cincinnati; and to the circumstance that he had founded, thirty years ago, the school in which they were then assembled, he says: "My heart still fondly turned to my first love, your alma mater. Her image, glowing in the warm and radiant tints of earlier life, was ever in my view. Transylvania had been reorganized in 1819, and included in its Faculty Professor Dudley, whose surgical fame had already spread throughout the West, and that paragon of labor and perseverance, Professor Caldwell, now a veteran octogenarian. In the year after my separation from this school, I was recalled to that; but neither the eloquence of colleagues, nor the greeting of the largest classes which the University ever enjoyed, could drive that beautiful image from my mind. After four sessions I resigned; and was subsequently called to Jefferson Medical College, Philadelphia; but the image mingled with my shadow; and when we reached the summit of the mountain, it bade me stop, and gaze upon the silvery cloud which hung over the place where you are now assembled. Afterward, in the Medical Department of Cincinnati College, I lectured with men of power, to young men thirsting for knowledge, but the image still hovered around me. I was then invited to Louisville,

became a member of one of the ablest Faculties ever embodied in the West, and saw the halls of the University rapidly filled. But when I looked on the faces of four hundred students, behold, the image was in their midst. While there I prosecuted an extensive course of personal inquiry into the causes and cure of the diseases of the interior of the continent; and in journeying by day, and journeying by night—on the water, and on the land—while struggling through the matted rushes where the Mississippi mingles with the Gulf—or camping with Indians and Canadian boatmen, under the pines and birches of Lake Superior, the image was still my faithful companion, and whispered sweet words of encouragement and hope. I bided my time; and after twice doubling the period through which Jacob waited for his Rachel, the united voice of the Trustees and Professors has recalled me to the chair which I held in the beginning."

In the autumn of 1850, Dr. Drake was recalled to Louisville, to the chair which he had vacated eighteen months before. He remained in the school for two sessions, and then finally left it, once more to re-enter the Medical College of Ohio, now reorganized with an abler faculty, and under brighter auspices. It was here, just at the opening of the session, full of hope and expectation about the class and the prospects of the Institution, that the hand of death was laid upon him, and that his varied but brilliant career was arrested.

The immediate cause of his death was arachnitis, brought on by over-exertion of the brain, by the labor and excitement consequent upon the opening of the session of the Medical College of Ohio. His illness was of short duration; and he departed in the full vigor of his intellectual faculties, having, only a week before his final seizure, lectured and written with his accustomed energy and ability. At the time of his death, which occurred on the 6th of November, 1852, he had just completed his sixty-seventh year. The funeral was attended by an immense concourse of citizens, and by the Faculties and pupils of the Cincinnati Schools of Medicine. The body was

deposited, in fulfilment of his own wishes, by the side of his wife, at Spring Grove Cemetery, where the profession of Ohio will, doubtless, at some future day, erect a suitable monument, so justly due to his memory.

It is to be regretted that Dr. Drake should have deemed it necessary, at his advanced age, to leave the University of Louisville, with which his name and fame had been so long associated, for the Medical College of Ohio. He could hardly have hoped, under the circumstances, to teach much longer, and it was scarcely reasonable in him to expect that, in his endeavors to build up a great and flourishing institution, he could, at least for the first few years, enjoy much ease of mind, or relaxation of body. But a destiny seemed to have hung over him, and to have hurried him on. He could not, and would not, resist a long-cherished wish to spend the evening of his life in an institution, to which, early in his career, when he had not yet acquired any substantial fame, he had given birth. His affections had never been alienated from her for a moment, even in his exile as a teacher in other States; he fondly hoped that he should live long enough to see her assume a proud rank among the great schools of the country; and he prayed that God might permit him to breathe out his last breath in her service, and that he might die in the midst of her pupils, and be followed by them to his final resting-place in the tomb. His wish, in this respect, was gratified; and few can doubt that, had his life been spared a few years longer, he would have realized his other expectations.

Having spoken of Dr. Drake as a founder of Medical Schools, and of his connection with various Medical Faculties, we may, in the next place, contemplate him as a philanthropist, a patriot, and a medical author.

The subject of public education and morals was always near his heart. He took an active part in the establishment and support of the "Western Literary Institute and College of Professional Teachers," at Cincinnati, attended many of its meetings, often served upon its committees, and delivered several addresses, replete with wisdom and sound learning. Among

these was a very elaborate "Discourse on the Philosophy of Family, School, and College Discipline," one of the best and most able of his many occasional productions. The first time I ever heard him speak in public was at a meeting of the College, in 1834, and I well remember how completely he enchained the vast audience. He cherished, with a deep and abiding interest, all institutions for the diffusion of knowledge, and for the promotion of virtue and piety, as well as all charitable establishments, especially hospitals, lunatic asylums, and schools for the education of the blind and the deaf and dumb.

In 1821, he procured the establishment, at Cincinnati, of the Commercial Hospital of Ohio, of which, at the time of his death, he was one of the physicians. The grant was accompanied by an endowment, which has afforded the institution great facilities, and enabled it to diffuse its blessings widely among the poor sick of the city and township of Cincinnati, as well as among the boatmen of the Southwestern waters. Connected with the Hospital was a Poor-house and an Asylum for the Insane; the latter of which, however, proving inadequate to the objects intended, Dr. Drake used every possible exertion, by repeated appeals to his brethren, and, finally, to the Legislature, to have this portion of the establishment removed, and placed under a separate board. The result was the present noble Institution for the Insane at Columbus, the capital of Ohio.

In January, 1834, he made an appeal to the Legislature of his adopted State in behalf of the establishment of an institution for the education of the blind; and, early in the following year, he read an able report before the Medical Convention of Ohio, at their meeting at Columbus, on the necessity for hospitals in the valleys of the Mississippi and the Lakes, for the accommodation and relief of those engaged in the commerce of the Southwest, as well as of travellers. Copies of this report were transmitted to the General Assembly of Ohio, and to the President of the United States, to Congress, and to the Heads of Departments. How far these labors were

instrumental in promoting the object in question, I am not informed; but it is certain that Congress soon afterwards authorized the establishment of these institutions, and that they now greet the eye and cheer the spirits of the boatman at numerous points of the Southwest. It is but justice to state, in this connection, that the idea of this great and noble project originated with Dr. Cornelius Campbell, a benevolent physician of St. Louis.

In 1827, Dr. Drake established the Cincinnati Eye Infirmary. It was modelled after similar institutions in New York and Philadelphia, had a regular board of visitors, and was intended for the reception and accommodation of all classes of ophthalmic patients, the poor as well as the rich, but particularly the former. It was the first attempt of the kind in the Southwest, and, for a time, was remarkably successful. The indigent sick from the city and neighborhood flocked to it daily for advice and treatment, and it speedily attracted persons from abroad. The consequence was that Dr. Drake soon became a distinguished oculist, and acquired no little skill as an ophthalmic surgeon. I doubt whether any other practitioner in the Southwest performed, during the first few years after the establishment of this institution, so many operations for cataract, artificial pupil, pterygium, and lachrymal fistula. His favorite operation for cataract was division, but he also occasionally performed extraction; a procedure requiring great manual dexterity and a thorough knowledge of the anatomy of the eye.

To the influence of Dr. Drake was due, in an eminent degree, the establishment of the Kentucky School for the Instruction of the Blind, at Louisville. He was the first to direct attention prominently to the subject in 1841, in a course of popular lectures on Physiology, which he delivered in the University of Louisville, devoting, when he came to the eye as an organ of vision, an evening to the method of teaching the blind, accompanied by a practical illustration, and concluding with an earnest and eloquent appeal to the audience, a highly numerous and respectable one, on the

importance of such an institution. The appeal, thus made, exerted an electrical influence. Every one present was affected by it. That evening, the blind in Kentucky, hitherto neglected and almost forgotten, had many friends. With the aid of Judge Bullock, a member of the State Legislature, a bill was finally passed through that body, with a grant of ten thousand dollars, to assist in putting the School in successful operation; and it is gratifying to know that it is now one of the best establishments of the kind in the country.

Dr. Drake had always, from an early period of his life, evinced a deep interest in the cause of temperance, unfortunately now so much on the decline. During his residence at Mayslick, the rallying point, for many years, of the people of the neighborhood on election, parade, and gala days, as well as during court-time, he often had occasion, when yet a mere boy, to witness the deplorable and disgusting effects of the inordinate use of intoxicating drinks, and subsequently, after he had become a student and practitioner of medicine, he could not fail to observe that it was a frequent cause of disease and death, both moral and physical. He saw that it was the source of incalculable mischief, and that it lay at the foundation of nearly all the crimes that degrade and debase society, and reduce man to the level and condition of the animals by which he is surrounded. He saw at work an enemy, which, like "the pestilence that walketh by noonday," silently but effectually destroys the peace and happiness of the domestic circle, which raises the arm of the parent against the child and of the child against the parent, and which fills our infirmaries, poor-houses, and penitentiaries with inmates. In a word, he saw that intemperance was sitting, like a mighty incubus, upon the bosom of society, tainting its very breath, and, in some instances, threatening the annihilation of entire families.

To such scenes, so well calculated to rouse his young and philanthropic mind, Dr. Drake could not long remain an idle and unconcerned spectator. He felt that there was a necessity for reform, and, like a true Christian and patriot, as he was, he vigorously engaged in the work, determined, as far as

his time and means would admit, to do his part in arresting an evil, fraught with such momentous consequences to the peace and happiness of his fellow-creatures. Address followed address, and for a time the pages of his medical journal, the sure and steady medium of communication between him and his professional brethren, were literally teeming with articles upon the subject, dwelling with eloquent emphasis upon the malign and destructive effects of ardent spirits upon the human subject, considered in his moral, physiological, intellectual, and legal relations.

It was while thus occupied in advocating and advancing the cause of temperance, that an incident occurred in the neighborhood of Cincinnati, which afforded Dr. Drake an opportunity for the application of his knowledge and talents to the elucidation of a question of juridical medicine, often agitated, but never until then fully established. In March, 1829, an old man, named Birdsell, was convicted on an accusation of the murder of his own wife, and sentenced to capital punishment. He had long been addicted to the immoderate use of ardent spirits, followed by occasional attacks of mania a potu, in one of which he committed the crime which he was about to expiate upon the gallows. Dr. Drake having carefully investigated the case, became so fully satisfied that the prisoner labored under a paroxysm of this kind at the time referred to, that he was induced to regard him as an irresponsible individual, precisely as a man who perpetrates homicide when affected with mental alienation from other causes. The court, however, waived all discussion of the point, so ably presented by the learned witness, and submitted the case, with the broad facts, to the jury, who returned a verdict of murder in the first degree. A minute account of the trial was soon after published in the third volume of the "Western Journal of the Medical and Physical Sciences," in which Dr. Drake fully elaborated his views, and unhesitatingly affirmed that insanity of this kind ought, in law, to be an immunity from punishment. The paper attracted much attention, and its sentiments received the unqualified approbation of a number

of the leading medical men of the country. The "American Jurist and Law Magazine," published at Boston, gave an extended notice of it, and indorsed the correctness of the author's conclusions; a circumstance, which, considering the able character of that periodical, was highly flattering to his judgment and scientific attainments. Professor Beck, of Albany, also presented a full outline of the case in his great and learned work on Medical Jurisprudence, expressing his conviction of the correctness of Dr. Drake's opinion, and awarding to him the praise of originality for his suggestions. The case likewise attracted the attention of Governor Trimble, who considered it of sufficient importance to invite to it, in his annual message, the attention of the General Assembly of Ohio, and who, when he found that his appeal was in vain, had the humanity, as well as the sagacity and firmness, to commute the punishment of the criminal into perpetual imprisonment; thereby preserving the judiciary from the odium of illegally depriving a citizen of his life.

In December, 1841, Dr. Drake organized in the University of Louisville, then the Medical Institute of that city, a Physiological Temperance Society, for the benefit of the members of the medical class, of whom it was exclusively composed. Its object was to investigate the subject of alcoholic drinks, in their effects upon the system, and, incidentally, the abuse of other stimulants and narcotics. The society soon became popular with the pupils; for, in less than a month after its establishment, it had upwards of one hundred members, embracing nearly two-fifths of the entire class. Its meetings were held semi-monthly throughout the session of the school; and its exercises, in which the distinguished and philanthropic founder, who was also its president, always took an active part, consisted in the reading of reports and the delivery of addresses on the nature and composition of the different kinds of liquor, and of their effects upon the system, in its healthy and diseased condition. The association continued in active operation until the spring of 1849, when, in consequence of Dr. Drake's retirement from the University, it was abandoned.

In 1835, he exerted himself, with the ability of a statesman and the zeal of a true patriot, in enlisting the attention of the people of the Southwest in favor of the establishment of a great railroad chain between the Ohio River and the tide-waters of the Carolinas and Georgia. In the month of August, of that year, he presented an elaborate report upon the subject, at a public meeting of the citizens of Cincinnati, pointing out the advantages, in a commercial, social, and political aspect, of such a road, and concluding with an eloquent appeal to the people of the different States through which it was to pass, or which were to be benefited by its erection. Great interest was, for awhile, felt in the subject. On the 4th of July, 1836, a large convention was held at Knoxville, Tennessee, at which not less than nine States were represented. Dr. Drake was a member of that convention, as well as a member of the general committee which prepared business, and made a report on the practicability of the enterprise, and the best method of obtaining the requisite authority for carrying it into successful operation. The plan finally failed, chiefly on account of the unwillingness on the part of Kentucky, whose welfare, it was supposed, might seriously suffer by the result, to grant the right of way through her territory.

It cannot be expected, in such a brief sketch as this must necessarily be, that every event in the life of Dr. Drake should be touched upon. I cannot, however, close this branch of the subject, without alluding to a feature in his character, as extraordinary as it was beautiful and impressive. I allude to his attachment to Cincinnati, the checkered scene, for fifty years, of his labors and his usefulness. Although he was often absent, such was his loyalty and devotion, that no earthly consideration could induce him to change his residence or abandon his citizenship. If he occasionally left her for a season, it was only that he might enjoy her the more at his return, as a lover sometimes voluntarily absents himself from his mistress that he may enjoy her presence the more at his reunion with her. His love for Cincin-

nati was real and unaffected. He had been her first medical pupil, her first medical graduate, her first medical author, and the founder of her first medical school. He had watched her progress with the satisfaction that a parent watches the career of a favorite and promising child; he had seen her in her weakness, and he had beheld her in the might of her strength, after she had risen to opulence and respectability as a great commercial mart, as a nursery of painters and sculptors, and as a city of able, enterprising, and enlightened men. If she is not the seat of a great medical school, an object which he had unceasingly at heart for the third of a century, the fault was not his, but of the circumstances by which he was surrounded, and which neither his genius, his industry, nor his tactics could control. Whether absent or present, whether in prosperity or adversity, he never ceased to love her, and to feel and manifest the deepest interest in her welfare and prosperity. There was hardly a measure, projected during his lifetime, intended to promote her advancement, that did not either originate with him, or meet with his hearty co-operation and support. Her people owe him a lasting debt of gratitude, not only for the many services which he rendered her, but also for being, at the time of his death, her greatest and most illustrious citizen.

His attachment to the West was hardly less remarkable. No inducement could seduce him away from the adopted home of his parents. He loved its broad and luxuriant fields, covered with herds and wild flowers; its noble and romantic forests, rendered vocal with the music of birds and insects, and its graceful and majestic streams, bearing upon their bosom thrice a thousand vessels, freighted with the produce of its rich and fertile soil. Everything around him was in harmony with his nature; and a residence in New England, or New Jersey, his native State, would have been as irksome and distasteful to him, as a residence at the Capital of the Union would be to the wild man of the forest.

Yet was his love not selfish. It was not limited to Cincinnati and the West; it embraced the whole Union, and gloried

in every measure that was adopted for its safety, welfare, and perpetuity. He watched with intense anxiety, hardly exceeded by that of Mr. Clay himself, the Compromise of 1850, and no one was more heartily rejoiced at its successful issue. While his domestic feelings, all his home sympathies, were for the West, his heart and soul were for the Union, embracing all its most cherished interests.

While the discussion of the Compromise question was going on in the Senate of the United States, and everywhere agitating the public mind, Dr. Drake was not idle. He had long perceived and lamented the ignorance which prevailed upon the subject of slavery in the Northern and Eastern States, and he determined, though not without reluctance, on account of the novelty of his position, to correct, if possible, some of the many misapprehensions under which many even of the better and more enlightened people of those regions labored. He knew, at all events, that an appeal to facts, vouched by his own experience and veracity, could do no harm, while, perhaps, it might effect some good. He could not disguise from himself the circumstance that his name was familiar to all the great and leading men of New England, and he accordingly addressed himself, as the honored vehicle of his communications, to one of the fathers of his own profession in that country. This gentleman was the late Dr. John C. Warren, an old personal friend, by several years his senior, and for a long time Professor of Anatomy and Surgery in Harvard University, at Boston. The letters which he addressed to this distinguished physician and surgeon were three in number, and they were published, some months afterwards, in the National Intelligencer at Washington. They were written in the winter of 1850-51, while the author was delivering a course of medical lectures in the University of Louisville, and are characterized by great force of style, by remarkable moderation of tone and feeling, and by extraordinary logical precision, combined with a thorough knowledge of the subject. They attracted much attention at the time, and deserve to be preserved in book form, for extensive distribution. A copy should

be sent to every house in the free States; for no better antidote could be furnished against the poisonous influences of such exaggerated productions as "Uncle Tom's Cabin." It would induce the rash and misguided to pause, and to consider whether the course they are pursuing is not calculated to do vast and abiding mischief, not only to the slave but to the Union. Dr. Drake deserves the gratitude of every American citizen for stepping aside from his ordinary pursuits, from no other motive than that of serving his country, to discuss, in so able and philosophical a manner, a topic of such great and absorbing interest. ✓

Dr. Drake was a voluminous writer. His contributions to medical journals, in the form of original essays, reviews, and bibliographical notices, his temperance lectures and public addresses, would, if collected, form several large octavo volumes. Much, indeed by far the most, of what he wrote was excellent; some was, perhaps, indifferent; but none was really bad. *Nihil quod tetigit non ornavit.* His style was always clear, fresh, and vigorous, often eloquent, and sometimes elegant. As a reviewer, his performances were generally rather analytical than critical. Indeed, as a critic he usually failed, from a sense of too much cautiousness. As a medical journalist, he labored hard, and long, and zealously to elevate the character and dignity of the profession in the West and South, and he rendered, beyond doubt, the cause an immense amount of service. His pen, for many years, was never idle; and if it was occasionally dipped in the ink of bitterness, to minister a rebuke or silence an enemy, it was only for a moment, when it would resume its wonted channel, and deposit the rich and varied freight of his well-stored mind.

His first attempt at medical or scientific authorship was in 1810, five years after he attended his first course of lectures in Philadelphia, and five years before he became a graduate. It was comprised in a small pamphlet on the "Topography, Climate, and Diseases of Cincinnati," where he then resided. Although designed exclusively for his professional and scientific friends, the work soon attracted the attention of travellers,

in quest of information concerning the West, and thus suggested to him the idea of a treatise, constructed on a similar but much more extended scale. The result was his "Picture of Cincinnati," which soon acquired for him not only an American, but a European reputation. It was published at Cincinnati, in 1815, under the title of "Natural and Statistical View, or Picture of Cincinnati and the Miami Country." It was illustrated by maps, and accompanied by an appendix, giving an account of some late earthquakes, the aurora borealis, and southwest wind; the whole forming a duodecimo volume of two hundred and fifty-one pages. The book soon attracted the attention of the public, and invited immigration to the West, but especially to Cincinnati, from all parts of America and Europe. Everybody became interested in a country before so little known, and possessing advantages so glowingly depicted in the work under consideration. It was evident that the author had made a hit, not in a pecuniary point of view, but as it respected his reputation, and the future growth of what, in due time, was destined to become the "Queen City."

In 1827, Dr. Drake projected the "Western Journal of the Medical and Physical Sciences," the first number of which appeared in April of that year. The motto of the work, engraved upon a flower of the *Cornus Florida* upon the title-page, was exceedingly happy and appropriate: *Æ sylvis, æque atque ad sylvas nuncius*. It was literally, at that period, a messenger not only from, but also to, the woods. During the first year he had associated with him, as coeditor, Dr. James O. Finley, but at the end of that time it was brought out under his own management, which was continued until 1886, when, in consequence of his numerous engagements, and his frequent absence from home, he procured the efficient aid of Dr. William Wood, of Cincinnati, one of his former pupils. The Journal was originally issued monthly, but afterwards quarterly; and it continued to appear in this manner up to the period of the dissolution of the medical department of the Cincinnati College, in 1889, when it was transferred to Louisville, and

merged in "The Western Journal of Medicine and Surgery," of which, without contributing much to its pages, he continued to be one of the editors, until 1848, when he finally withdrew from the enterprise.

It is no easy matter, even under the most propitious circumstances, to maintain a public journal of medicine. The difficulties were much greater twenty-five years ago than at present. Then the West had few writers, and an editor was often compelled, from the paucity of material, to rely mainly upon his own efforts for filling up the pages of his periodical. Many of the contributions that were sent to the Western Journal of the Medical and Physical Sciences displayed the most miserable scholarship; and the consequence was that not a few of them had to be entirely rewritten before they could be committed to the hands of the compositor. "Copying, transposing, abridging, inverting, retroverting, decomposing, and recomposing," were a part of the labor and drudgery to which Dr. Drake had to submit in the progress of his enterprise. Nothing daunted, however, he worked hard upon its pages, which he adorned with many of his own effusions, both in the form of original articles and of reviews, until, after having been engaged upon it for twelve years, he finally, on his removal to Louisville, disposed of it in the manner already mentioned.

Writing nine years after the commencement of the Journal, he quaintly observes, that he had already owed allegiance to not less than nine publishers. "Thus," says he, "if our editorial vitality had not been truly feline, we should now be defunct." In consequence of these frequent changes, the work was rarely issued with any regularity, and hence much complaint on the part of subscribers was the result.

The interest which Dr. Drake always felt for his profession, induced him, in 1829, to begin the publication, in the Western Journal of the Medical and Physical Sciences, of a series of "Essays on Medical Education and the Medical Profession in the United States." The papers appeared in successive numbers of the periodical in question; and were

→ finally, in 1832, collected into a small octavo volume of upwards of one hundred closely printed pages. They are written with the author's wonted vigor of style, and display, throughout, great sound sense, a discriminating judgment, and a profound acquaintance with the topics of which they treat. The number of essays amounts to seven; the first of which relates to the selection and preparatory education of pupils; the second to private pupilage; the third to medical colleges; the fourth to the studies, duties, and interests of young physicians; the fifth to the causes of error in the medical and physical sciences; the sixth to legislative enactments; and the last to professional quarrels.

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In looking, lately, with some degree of care, over this work, I became impressed with the conviction that it is a production of great merit, and one that ought to be in the hands of every medical pupil and junior practitioner in the country. It comprises an admirable outline of medical ethics, or of the duties of medical men towards each other, of the responsibilities and requirements of the profession, and of the proper method of observing and investigating disease, conveyed in language at once forcible, dignified, and impressive. No one can rise from its perusal without sensibly feeling how much he has been instructed, and how far short he falls of the standard laid down by its distinguished author. It may be stated, as a remarkable fact, that the work covers the whole ground of medical education, and that it comprises every topic respecting medical reform so zealously, but indiscreetly, urged upon the consideration of the American Medical Association, at every returning meeting of that body.

In 1832, Dr. Drake published "A Practical Treatise on the History, Prevention, and Treatment of Epidemic Cholera," which was then desolating Cincinnati and the Western States. The work, forming a duodecimo volume of nearly two hundred pages, was designed both for professional and general use, and comprised an excellent and graphic account of that formidable malady; but it does not seem to have been well received, nor did it, I think, add anything to the author's reputation. From

the fact that much of it had been composed, and published in the *Western Journal of the Medical and Physical Sciences*, before he had witnessed the disease, it failed to inspire public confidence, and fell, in some degree, still-born from the press.

Two years after the publication of this treatise, he announced, as in progress of preparation, a work on "Anatomy, Physiology, and Hygiene," as a text-book for schools and colleges. The object was to promote the popular study of this branch of science, and to portray the pernicious effects of mere mental culture, without proper physical training. Some months after the announcement appeared, he published a specimen of the style and arrangement of the book, and this was the last of it; for his leisure never permitted him to complete it. Some years after this, he announced his intention of publishing a "Treatise on General Pathology," as a text-book for his pupils; but this also, for a similar reason, was never issued. The fact is, all his thoughts and affections were engaged upon his great work, presently to be mentioned, and he, therefore, regarded everything else as of subordinate importance.

In 1842, Dr. Drake published, in the sixth volume of the *Western Journal of Medicine and Surgery*, a paper on the "Northern Lakes as a Summer Resort for Invalids of the South," which, at the time, attracted much attention from the medical and public press. The article, which had been previously read as an introductory address to his course of lectures in the University of Louisville, was designed to illustrate the advantages offered, in the hot season, by our northern lakes, as a residence, to the people of the South, and was founded, mainly, upon his own observations made the preceding summer in a professional tour of two months. It abounds in beautiful and graphic delineations of the wild and romantic scenery of these great inland seas, of the towns and villages which stud and embellish their banks, of the nature of the climate, the productions of the surrounding country, the battle scenes of the late war with Great Britain, and the character and mode of life of the inhabitants, them-

selves a subject of study for the painter, the poet, and the philosopher. There are few tracts, of the same size, in the English language on the subject of travel, which contain so vivid, gorgeous, and life-like an account of the countries to which they relate. Nothing seems to have escaped the observation of the author. At one time, his mind is dazzled and almost bewildered by a vast, dark, and impenetrable forest; at another, by the silvery and unruffled surface of a broad and unfathomable lake, reflecting the variegated and fantastic tints of the sky, or bearing upon its bosom the mighty steamboat, and the canoe of the adventurous Indian, the Canadian trapper, or the holy and self-denying missionary; now, by some lofty and majestic cliff, rearing its head into the clouds, and serving as a monument of the works of God; and anon, by the bewitching beauties of the setting sun, as his rays sport upon the heavens above, or paint, in all the gorgeous colors of the rainbow, his image upon the waters below.

The latest of the minor productions of Dr. Drake's pen was a small volume of "Discourses," delivered, by appointment, before the Cincinnati Medical Library Association, in 1852. It is comprised in a small duodecimo volume, and is divided into two parts, the first of which treats of the early medical times in Cincinnati, and the other of medical journals and libraries. Few medical men, indeed, few men of any profession, will rise from the perusal of this unpretending little volume without feeling that they have been both interested and instructed. The first part, giving an account of the pioneer physicians of the "Queen of the West," and of the prominent men and scenery of that early period, possesses, in my opinion, all the charm and interest of a romance, in which the author, while he exhumes his predecessors and contemporaries, and places them, in life-like colors, before the eyes of his readers, forms a conspicuous feature. His mind was evidently deeply imbued with the spirit of the subject, and he has treated it in a style and manner of which no other man, either at Cincinnati or elsewhere in the West, is capable. It is replete with the characteristics of a man of feeling and genius. His similes

and illustrations are so striking and forcible, that, in perusing this part of the book, the reader imagines himself in the veritable presence of the men and things which he delineates, and which pass, as in a moving picture, before him, even to the little Chickasaw pony, and the horrible witches, which at that early day still infested the neighborhood, and tormented the poor inhabitants! I doubt whether there is within the same compass of the "Pioneers," that most delightful romance of James Fenimore Cooper, so great an amount of powerful and graphic delineation of character, with so much true, artistic coloring.

But the most splendid exhibition of his genius is in his work on the Diseases of the Interior Valley of North America, an enduring monument of his industry, his research, and his ability. Upon this production, which, unfortunately, he did not live to complete, he spent many of the best and riper years of his life. As early as 1822, in an appeal to the physicians of the Southwest, he announced his intention of preparing it, and solicited their co-operation. His object, as stated in his circular, was to furnish a series of essays upon the principal diseases of this region of America, derived from his own observation and from that of his friends, and forming, when completed, a national work. Various circumstances conspired to delay the appearance of the work. The author's time, in the winter season, was much occupied in teaching, and in matters growing out of his official relations. Medical schools were obliged to be erected and fostered. Besides, he was the editor of a medical journal, to the pages of which he was often the chief contributor; and he was also frequently compelled to deliver public addresses, which consumed much of his leisure. His facility, as a public speaker, was too well known in the community, to permit him to remain unoccupied. The objects concerning which he was called upon to address his fellow-citizens were often of a benevolent character, and he had too much good nature to resist them, however much they might encroach upon his more legitimate pursuits and the great aim of his life.

30 years
preparation

In 1837, fifteen years after the publication of his circular, he found, for the first time, sufficient leisure to enter vigorously upon the collection of materials for his long-contemplated work. In the summer of this year, accompanied by his two daughters, he visited a portion of the South for that purpose, during a tour of about three months. In 1843, he made a second tour, embracing Louisiana, Florida, Mississippi, Alabama, and the Gulf of Mexico; and subsequently he explored the interior of Kentucky, Tennessee, the two Carolinas, Virginia, Western Pennsylvania, New York, Illinois, Indiana, Michigan, Iowa, Wisconsin, Missouri, the Great Lakes, and Canada. Wherever he went his fame preceded him, and he was kindly received by his professional brethren, many of whom vied with each other to show him attention and hospitality. It was during his absence upon these missions, which he performed with the zeal of an apostle of science, that he wrote those numerous and interesting travelling editorials, as he styled them, for the *Western Journal of Medicine and Surgery*. These epistles, which form so conspicuous a feature of that periodical during the time referred to, were usually descriptive of the manners, habits, and diseases of the people among whom he wandered, of the climate, scenery, and productions of the country, and, in short, of whatever seemed, at the moment, to strike his fancy, or interest his mind.

The materials thus collected were gradually digested and arranged, and finally presented to the profession, in the summer of 1850, under the elaborate title of "*A Systematic Treatise, Historical, Etiological, and Practical, on the Principal Diseases of the Interior Valley of North America, as they appear in the Caucasian, African, Indian, and Esquimaux Varieties of its Population.*" The work is illustrated by numerous charts and maps, and was published at Cincinnati under the author's immediate supervision. A second volume, the composition of which was in an advanced state at the time of his decease, was afterwards issued under the joint care of Dr. Hanbury Smith, of Ohio, and Dr. F. G. Smith, of Phila-

delphia, and is entirely devoted to subjects on practical medicine. The two together constitute a monument of the genius and industry of their author, as durable as the mountains and the valleys, whose medical history they are designed to portray and illustrate. The toil and labor expended upon their production afford a happy exemplification of what may be accomplished by the well-directed and persistent efforts of a single individual, unaided by wealth, and unsupported by the patronage of his profession.

I am not aware that Dr. Drake ever engaged in any purely literary composition, or that he ever contributed anything to the literary periodical press, beyond some addresses and reports. For such pursuits he had no time, whatever might have been his fitness and inclination. Nor had he much leisure for indulging his taste in miscellaneous reading. Every moment of his time was occupied in lecturing to his pupils, in writing upon scientific subjects, and in laboring for the advancement of his profession, or the cause of morality and benevolence.

To his other accomplishments he added that of a poet. Several of his pieces, composed during the hours of relaxation from his professional pursuits, possess much beauty and sweetness. They generally partook either of the humorous, or of the solemn and pathetic.

Dr. Drake was a man not of one, but of many characteristics. His very look, manner, step, and gesture were characteristic; they were the outward signs of the peculiar nature within. His conversation, his voice and modes of expression, were characteristic,—all tending to stamp him, in the estimation and judgment of the beholder, as an extraordinary personage. But there was one feature which jutted out, prominently and conspicuously, above all the rest, and which served, in an eminent degree, to distinguish him from all the men of my profession I have ever known. This was intensity; intensity of thought, of action, and of purpose. This feeling, to which he was indebted for all the success which marked his eventful career, exhibited itself in all the relations of life; in his extra-

ordinary devotion to his family, his attachments to his friends, his unflinching love for his profession, in his interest in the cause of temperance, in his lectures before his pupils in the University, in his writings, in his debates, and in his controversies. No apathy or lukewarmness ever entered his mind, or influenced his conduct, in any scheme which had for its object the welfare of his species, the promotion of science, or the improvement of the human intellect. His temperament was too ardent to permit him, had he otherwise felt so inclined, to be an idle and unconcerned spectator of the world around him. It was hot, and positive, like the pole of an electric battery, intense, ever restive, always doing.

It was this attribute of his mind which would have made him great and distinguished in any walk of life he might have chosen. He had talent and intellect enough, had he wished it, to have shone in the senate, adorned the bar, or made a great pulpit orator. I have often thought that he had mistaken his profession, and that he ought to have been a politician. He might have made a great Secretary of State; for he had the astuteness of a Webster, the subtilty of a Calhoun, and the indomitable energy of a Benton.

His mind was quick, grasping, far-seeing; he acquired knowledge with great facility, sometimes almost intuitively, and readily perceived the relations and bearings of things. Imbued with the true spirit of the Baconian philosophy, he delighted in tracing effects to their causes, and in unravelling the mysteries of science and knowledge. He was a keen observer, not only of professional matters, with which his daily studies brought him into more immediate contact, but of society and the world at large. Added to all this, he had a retentive memory, extraordinary powers of analysis, profound ratiocination, and great originality, with industry and perseverance seldom combined in the same individual. He possessed, in short, all the attributes of a great and commanding intellect, capable of vast exploits, and the accomplishment of great designs. His executive powers were extraordinary.

Nowhere did this intensity exhibit itself in a more striking

manner, or in a greater degree, than in the lecture-room. It was here, surrounded by his pupils, that he displayed it with peculiar force and emphasis. As he spoke to them, from day to day, respecting the great truths of medical doctrine and medical science, he produced an effect upon his young disciples, such as few teachers are capable of creating. His words dropped hot and burning from his lips, as the lava falls from the burning crater, enkindling the fire of enthusiasm in his pupils, and carrying them away in total forgetfulness of everything, save the all-absorbing topic under discussion. They will never forget the ardor and animation which he infused into his discourses, however dry or uninviting the subject; how he enchained their attention, and how, by his skill and address, he lightened the tedium of the class-room. No teacher ever knew better how to enliven his auditors; at one time with glowing bursts of eloquence, at another with the sallies of wit, now with a startling pun, and anon with the recital of an apt and amusing anecdote; eliciting, on the one hand, their admiration for his varied intellectual riches, and, on the other, their respect and veneration for his extraordinary abilities as an expounder of the great and fundamental principles of medical science. His gestures, never graceful, and sometimes remarkably awkward; the peculiar incurvation of his body; nay, the very *drawl* in which he frequently gave expression to his ideas,—all denoted the burning fire within, and served to impart force and vigor to everything which he uttered from the rostrum. Of all the medical teachers whom I have ever heard, he was the most forcible and eloquent. His voice was remarkably clear and distinct, and so powerful that, when the windows of his lecture-room were open, it could be heard at a great distance. He sometimes read his discourse, but generally he ascended the rostrum without note or scrip.

His earnest manner often reminded me of that of an old and venerable Methodist preacher, whose ministrations I was wont to attend in my early boyhood. In addressing the Throne of Grace, he seemed always to be wrestling with the

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Lord for a blessing upon his people, in a way so ardent and zealous as to inspire the idea that he was determined to obtain what he asked. The same kind of fervor was apparent in Dr. Drake. In his lectures, he seemed always to be wrestling with his subject, viewing and exhibiting it in every possible aspect and relation, and never stopping until, like an ingenious and dexterous anatomist, he had divested it, by means of his mental scalpel, of all extraneous matter, and placed it, nude and life-like, before the minds of his pupils.

With abilities so transcendent, manners so ardent and enthusiastic, and a mind so well stored with the riches of medical science, Dr. Drake ought to have been universally popular as a teacher; nevertheless, such was not the fact. First course students often complained that his lectures were abstruse, in a degree wholly beyond their comprehension; that they could not follow his reasoning or argumentation, and that, despite their best directed efforts, they were unable to derive much profit. The more advanced members of his classes, on the contrary, never experienced any such trouble. They felt the deepest interest in everything that he uttered, and never failed to look upon him as a most able and instructive teacher. To account for this discrepancy, it is necessary to state that Dr. Drake's method of instruction differed materially from that of most of his contemporaries, both in this country and in Europe. Instead of beginning his course with the practical, every-day details of his department, he always devoted the first six weeks to the inculcation of general principles, deeming a knowledge of them of paramount importance to every student of medicine. This he always regarded as the philosophical part of the course, and he spared no efforts to place it prominently before the minds of his pupils. In doing this he was fully conscious of the difficulty under which he labored, and often lamented, in bitter strains, the deficiencies, on the part of his classes, which prevented them from appreciating his instruction. He saw how little many of the youths who resort to our lecture-rooms are prepared, by their habits and education, to profit by such a mode of teaching; and yet he

could not, durst not, in conformity with the dictates of his conscience and judgment, pursue any other. He would rather be unpopular with a portion of his classes than sacrifice duty and principle, or deviate from the standard which he had adopted as the rule and guide of his conduct in the lecture-room.

His fluency and facility of language gave him great advantage as a public debater. To his ability as a profound reasoner, he added subtilty of argument, quickness at repartee, and an impassioned tone and style, which rarely failed to carry off the palm in any contest in which he was engaged.

Dr. Drake always manifested extraordinary interest in the moral training of medical pupils. Sensible of the temptations which constantly beset their path and allure them from their duty, he took special pains, at the opening of every session of the different schools with which he was, from time to time, connected, to point out to them their proper position, and to warn them of their danger. As a means of promoting this object, as well as of advancing the respectability of the profession, he delivered, while a professor in the Cincinnati College, for several winters, a series of Sunday morning discourses to the students of that institution, on medical ethics, the *morale* of the profession, and the virtues and vices of medical men, embracing their duties to their patients, to the community, and towards each other. These addresses were usually attended by large numbers of the citizens of Cincinnati, and they exerted a wide and happy influence upon the youths for whom they were more especially prepared. Their publication would, I doubt not, be well received by the profession.

In the University of Louisville, as was before stated, he interested himself greatly in promoting the cause of temperance among the students; and, as a means of religious improvement, he was in the habit, for many winters, of joining such of them as felt an interest in the subject, at a Sunday morning prayer-meeting. In a word, he was ever ready with his advice and kindly offices, often affording aid and comfort to those who, in the absence of their parents and guardians, stood in need of a counsellor and friend.

He had a decided taste for the society of the young men of his profession, and always evinced a deep interest in their prosperity. The instances were not few in which he labored to advance the welfare of young men, some of whom have since risen to deserved distinction. It was his lot, especially in the earlier periods of his life, to have numerous private pupils, several of whom he educated gratuitously, at the same time treating them with true parental regard and tenderness. As a public teacher in the different schools with which he was connected, he aided in educating several thousand young men, and fitting them for the practical and responsible duties of their profession. The seed thus sown has brought forth much good fruit, the happy effects of which will be felt in future generations.

✓ His own standard of medical knowledge was of the most elevated nature. No one understood better than he the importance of a thorough education, and of a well-disciplined mind. His own early deficiencies, ever present and ever recurring, had made an impression upon him, which nothing could efface. His occupation as a teacher of medicine had brought him, for years, in daily contact with men and youths, who were not only destitute of preliminary education, but absolutely, from the want of opportunity and mental capacity, utterly incapable of acquiring any. This state of things, so prevalent and deplorable, he often lamented to his friends and colleagues, while he never failed, on all proper occasions, to assail it in his writings and prelections. The difficulty under which a teacher labors in imparting instruction to such pupils, and preparing them for the successful exercise of their high and responsible duties, as practitioners, can be more easily imagined than described. His daily experience in the lecture-room showed Dr. Drake how much of the good seed that is there sown falls upon barren soil; or how, instead of producing good fruit, it yields nothing but tares and thorns. Such was his feeling upon this subject, that, in numerous conversations which he had with me respecting it, he often expressed himself as being almost ready to abandon teaching forever. Like many

others, he perceived the remedy, but was unable, from the want of co-operation, to apply it. Poor as he was, he would a thousand times rather have lectured to a hundred intelligent and well-prepared young men, than to five hundred ignorant and ill-prepared. His object was not the acquisition of gain, but the desire to be useful and profitable to those whom it was his duty to instruct in the great principles of the healing art.

Of quackery, in all its forms and phases, he was an uncompromising enemy. He loved his profession and the cause of truth too well to witness, without deep solicitude, its impudent and unhallowed assaults upon the purity and dignity of medicine, considered as a humane, noble, and scientific pursuit. Hence, he permitted no suitable opportunity to pass without rebuking it, and holding up its advocates to the scorn and contempt of the public. In common with many of his brethren, he deprecated its unblushing effrontery, and regretted the countenance and support which it derives from a thoughtless clergy and an unscrupulous and unprincipled press. He saw that it was an evil of great magnitude, threatening the very existence of our profession; and, as a journalist, he deemed it his duty to bring the subject frequently and prominently before his readers, intreating their aid and co-operation in suppressing it.

He was the founder of no new sect in medicine. For such an enterprise he had no ambition, even if he had been satisfied, as he never was, of its necessity. He found the profession, when he entered it, at the dawn of the present century, steadily advancing in its lofty and dignified career, refreshed, and, in some degree, renovated, by his immediate predecessors, and his chief desire was to ingraft himself upon it as an honest, conscientious, and successful cultivator. How well he performed the part which, in the order of Providence, he was destined to play, in this respect, the medical world is fully apprised. No man was more sensible than he of the imperfections and uncertainties of the healing art, and no one, in this country, in the nineteenth century, has labored more ardently and zealously for its improvement. For the systems of the

✓ schools no physician and teacher ever entertained a more thorough and immitigable contempt. He was an Eclectic in the broadest and fullest sense of the term. His genius was of too lofty and pervasive an order to be trammelled by any authority, however great, respectable, or influential. Systems and system-mongers were alike despised by him, as they could not, in his judgment, be otherwise than dangerous in their practical bearings, and subversive of the best interests of science. It was Nature and her works which he delighted to study and to contemplate. Not that he regarded with indifference whatever was good and valuable in the productions of others, but simply because he preferred to drink at the fountain rather than at the turbid stream. Like Hippocrates and Sydenham, he was a true observer of Nature, and, we may add, a correct interpreter of her phenomena and her laws; his ambition was to be her follower during life, and at his death to leave a record, a true and faithful transcript, of the results of his investigations for the benefit of his brethren.

✓ In his intercourse with his professional friends his conduct was a model. His code of ethics was of the purest and loftiest character. He was not only courteous and dignified, but highly considerate of the rights of others. His habits of punctuality were established early in life, and were never departed from. He made it a rule never to make a professional brother wait for him at a consultation.

The examination of his cases was conducted with great care and attention; indeed, he seemed occasionally to be over-minute and even tedious, spending a longer time over his patients than the exigencies appeared to require. His early habits of caution never forsook him at the bedside of the sick.

In his intercourse with his patients his conduct was regulated by the nicest sense of honor. No one understood better how to deport himself in their presence, or how to preserve inviolate their secrets. Hippocrates, who exacted an oath from his pupils never to reveal anything that was confided to them by their employers, never more scrupulously observed the sanctity of the sick-chamber. Kind and gentle in his manners, he was

as much the friend as the physician of his patients, not a few of whom made him their confidant and counsellor. The advice which he delivered under such circumstances was often of great service to the interested party, by whom it was never forgotten, owing to the earnest and solemn tone in which it was imparted.

In the bestowment of his time and labor, he made no distinction between the rich and the poor; the latch-string of his heart was accessible to all. "The importance of the malady, and not the patient's rank or purse, was the measure of the attention which he paid the case." It was his province, from his peculiar relations, to attend gratuitously, long after he had attained the most exalted rank in his profession, numerous widows and orphans, as well as the families of not a few of his old friends, who had become poor in consequence of the vicissitudes of fortune. These labors, which encroached much upon his time and domestic enjoyments, he always performed with a willing heart, ever regarding their objects as specially entitled to his consideration and regard.

I had great confidence in his professional acumen. I saw enough of him in the sick-chamber to satisfy me that he had a most minute and thorough knowledge of disease, and of the application of remedial agents. There was no one to whom I would rather have trusted in my own case, or in that of a member of my family; yet there were some, and some in our own profession, who pretended to have no confidence in his judgment or skill, who thought him a mere theorist, a bold, closet speculator, and an unsparing, reckless practitioner, whose treatment was altogether too spoliative, and, consequently, dangerous. Of the truth of such a charge, I never, during a familiar acquaintance with him of many years, had any evidence. The charge, doubtless, had its origin in jealousy and misconception. It can hardly be supposed that a man of such transcendent intellect, who had studied his profession so well, so anxiously, and so intensely, who had observed disease so long and so thoroughly, who had written so much, and delivered so many courses of lectures; in a word, who

had devoted his whole life to the science of medicine and its kindred branches, should have been a bad or even an indifferent practitioner. The idea is too absurd to require serious refutation. It is abundantly disproved by the fact that those who knew him best had generally the most confidence in him, in this respect. Many of his most intimate friends in Cincinnati continued to employ him up to the latest period of his life, as did also not a few of his earlier patients,—persons who may be presumed to have been fully competent to appreciate his judgment and practical ability. He rarely, I know, gave a lecture in the University of Louisville without, at the close of it, prescribing for five or six of his pupils. An hour was thus, not unfrequently, spent every day of the week.

Besides, he never lacked business. In the early part of his career, his practice was large and laborious; and if, as he advanced in age, it became comparatively small, it was owing, not to a want of confidence on the part of the public, but to his frequent and protracted absence from Cincinnati; a circumstance wholly at variance, in every community, with the acquisition and retention of a large family practice. Such a practice, in fact, especially as he grew older, he did not desire; it was incompatible both with his inclinations and the great object of his ambition, which was to teach medicine, and to compose a great and useful work on the diseases of the interior valley of North America. Business never forsook him at home or abroad. The numerous letters which he received from his professional brethren and from patients at a distance, soliciting his advice in cases of difficulty and doubt, show in what estimation his science and skill were held by the public.

His practice in acute inflammatory diseases was bold and vigorous. The lancet was his favorite remedy; and he drew blood freely, and without stint, in every case in which the symptoms were at all urgent or threatening, provided the system was in a condition to bear its loss. Having attended, in early life, the lectures of Dr. Rush, the most eloquent and captivating teacher of medicine in his day, in this country,

and a strenuous advocate of sanguineous depletion, he imbibed a strong prejudice in favor of this practice, which he retained to the latest period of his career. But it would be unjust to say that he employed the remedy without judgment or discrimination. If he bled freely he also knew when to bleed. No man had a better knowledge of the pulse and the powers of the heart.

His conduct, in all the relations of life, was most exemplary. In his friendships, usually formed with much caution, he was devoted, firm, and reliable, as many who survive him can testify. His attachments were strong and enduring. Few men, as he himself declared to me only a few months before his death, possessed so many ardent and faithful friends. His social qualities were remarkable. He loved his friends, enjoyed their society, and took great pleasure in joining them at the domestic board; where, forgetting the author and the teacher, he laid aside his sterner nature, and appeared in his true character, plain and simple as a child, cheerful, amiable, and entertaining. It was during such moments, which served to relax the cords of his mind, and to fit it for the renewal of its labors, that he shone to most advantage. His conversational powers on such occasions, as well as in the drawing-room, although superior, were not equal. Like all great and busy men, he had his cares and annoyances; his hours of depression and despondency; his fits of absence and restlessness.

Although Dr. Drake had many warm, staunch, and admiring friends, it would be untrue to say that he had no enemies. He had too ardent and positive a temperament, too much ambition, too much intellect, to be altogether exempt from this misfortune, if such, indeed, it may be called. I assume, and I think the world's record abundantly confirms the conclusion, that no great, useful, or truly good man was ever wholly without enemies. Such an occurrence would be an anomaly in the history of human nature. It has been well observed, by one who was himself great, and who occupied, for many years, no small space of the public eye, that

"slander is the tax which a great man pays for his greatness." The more conspicuous his position, the more likely will he be to have enemies to assail and misrepresent his character. It is only the passive, the weak, the idle, and the irresolute, who are permitted to pursue, unobserved and unmolested, "the even tenor of their way." To this class Drake did not belong. His mission was a higher and a nobler one. He was destined, under the arrangements of Providence, to perform great deeds, and to be a great and shining light in his profession; and it would have been impossible for him, in attempting to carry out these designs, to steer clear of enemies. But, although he had enemies, warm, bitter, and unrelenting, it is gratifying to know that he never wilfully wronged any human being. He was always just, always truthful, always conscientious. He never struck a blow where none had been struck before. Men who are fond of using harsh expressions have accused him of being captious, overbearing, dictatorial. During an acquaintance, intimate and uninterrupted, of nearly twenty years, during most of which we were colleagues at Cincinnati and at Louisville, I never witnessed any exhibition calculated to confirm such an accusation.

His early associations in medical schools, particularly in the Medical College of Ohio, his first and last love, were unfortunate, and exerted for a long time, if not, indeed, during the rest of his life, an unhappy influence upon his reputation as a quiet and peaceable man. Many of his colleagues were ordinary individuals, either wholly unfit for the discharge of the responsible duties assigned to them by the nature of their chairs, or, at all events, ill calculated to aid in building up a great and flourishing school. Misconceptions, misrepresentations, and, finally, bitter and unrelenting quarrels, were the consequences of this connection, which, from the attitude in which he was always placed as the prominent party, generally fell with severest effect upon Dr. Drake. Thus, he was often made to occupy, before the profession and the public, a false position, and obliged to act a part which did not naturally

belong to him. It seems to have been a principle with him, at this period of his life, never to allow a charge uttered by an assailant against his character to pass unnoticed or unrebuked. So frequent were these missives that, at length, even some of his warmest and most intimate friends were disposed to look upon him as a bitter and unrelenting controversialist. Nothing, however, could have been more unjust. His great error was that he was morbidly sensitive, and that he permitted himself to be annoyed by every puff of wind that swept across his path. Baseness and malignity never entered into his character. In all his difficulties and troubles, growing out of his early professional relations, I know not a solitary one in which he had not strict justice on his side. Nature and art had combined to give him powerful weapons, and no man better understood how to use them against the assaults of his enemies.

Of all his early associates in the Medical College of Ohio, Dr. John D. Godman was almost the only one for whom he cherished any sincere respect, or who came up to the standard he had formed of what a colleague and a teacher ought to be. That standard was, perhaps, capriciously high, so elevated as to render it difficult for any but a favored few to attain it. Be this as it may, it was, I doubt not, the cause of many of the troubles in which he was so soon to be involved, and which fate, blind and ill-directed, seemed ever ready to recall and perpetuate. For Godman, his first colleague in the chair of Surgery in the Medical College of Ohio,—rocked, like himself, in the cradle of poverty, deprived, like himself, of early educational advantages, and set apart, like himself, for some mechanical pursuit,—he ever cherished the warmest friendship and the most tender regard. He was evidently a man after his own heart, pure, of lofty ambition, full of genius and industry, and bent upon the achievement of great designs. How well he succeeded, the history of his short, sorrowful, and not uneventful life, so well delineated in the present volume, bears abundant testimony.

Like all great men, Dr. Drake had his foibles, and even his

great
expression

faults; but it may truly be affirmed that he never had a single vice. His moral character was cast in the finest and purest mould. His conduct, in all the periods and phases of his life, was squared by the strictest rules of probity, and by the nicest regard for the feelings and rights of others. Although he was long poor, he always paid his debts to the uttermost farthing. "Pay what thou owest" was, with him, a golden maxim.

For public amusements he had not only no love, but they were decidedly repulsive to his tastes and feelings. The impression made upon his tender mind at Mayslick, by this species of life, on parade and gala days, among his father's neighbors, was indelible. He never played a game of cards in his life; gambling and gamblers he alike detested. His whole career, in fact, from its commencement to its close, was an exhibition of attachment to moral principle. His life was one of constant and untiring industry and exertion, exhausting meditation, and the most resolute self-denial. He never knew anything of the luxury of the chase, or of trout-fishing. He might have read Izaak Walton's "Complete Angler," the "Contemplative Man's Recreation," or "Salmonia, or Days of Fly-fishing," with a view of seeking refuge from ennui, or relaxation from his scientific studies; but never for the purpose of learning, much less practising, the art. In a word, he labored incessantly under the impulse of a lofty ambition, and under an intense desire to improve his profession and benefit mankind.

In his domestic relations he was eminently happy. His attachment to Mrs. Drake has already been mentioned. She was a woman of superior character, and, after her death, he cherished her memory with a devotion bordering upon the romantic. His children, for many years his intimate companions, he idolized. His correspondence with them would fill many volumes; for it was not only frequent, but copious, extending often through many pages. His grandchildren came in for a full share of this kind of intercourse, so honorable to the heart and head of this great and good man. Their

birthdays never failed to be hailed by a letter, generally abounding in some witticism, some simple anecdote, or some good advice, conveyed in a plain, agreeable, and tender style, well adapted to their comprehension. During his sojourn at Louisville, he paid them every winter not less than three or four visits, often lecturing twice, and sometimes even thrice a day, that he might get in advance of his course, and thus obtain the requisite time. He had not a colleague of whom he did not occasionally borrow an hour for this purpose.

During his sojourn at Louisville, he addressed to his children a series of letters, recounting, in glowing terms, and portraying, with a true daguerreotype likeness, the deeds and scenes of his childhood up to the time he entered Cincinnati as a student of medicine. There is not an occupation incident to a new settlement in the West, or in which he was himself engaged, which he does not portray in these epistles in the most vivid and graphic manner. Had he been able to wield the pencil of a Cole, he could not have painted, in truer colors, the voyage of the first fifteen years of his monotonous but not uneventful life. A selection, by some judicious relative or friend of the deceased, would form a valuable contribution to our literature, especially for the young, whose minds could not fail to be benefited and improved by its perusal. In point of charm and interest, in moral and religious tone, in filial reverence and devotion, in just and philosophical deduction, they are not surpassed by the beautiful Autobiography of Jean Paul, as it is exhibited in the life of that extraordinary man by Mrs. Lee, herself one of the most delightful of writers.

The life of Dr. Drake was surprisingly eventful. No man that our profession has yet produced has led so diversified a career. He was, probably, connected with more medical schools than any individual that ever lived. It is rare that physicians interest themselves in so many public and professional enterprises as he did. His mind was of unlimited application. His own profession, which he served so well and so faithfully, was incapable of restraining it; every now and

then it overleaped its boundaries, and wandered off into other spheres. His career was thus in striking contrast to that of medical men generally, whose pursuits furnish few incidents of public interest or importance. His mission to his profession and to his age was a bright and happy one. No American physician ever performed his part better, or left a richer savor along his life-track.

But his life was not only eventful; it was also eminently laborious. No medical man ever worked harder, or more diligently and faithfully. His industry was untiring, his perseverance unceasing. It was to this element of his character, blended with the intensity we have described, that he was indebted for the success which so pre-eminently distinguished him from his professional contemporaries. He had genius, it is true, and genius of a high order; but without industry and perseverance it would have availed him little in the accomplishment of the great aims and objects of his life. He seemed to be early impressed with the truth of the remark of Seneca: *Non est ad astra mollis a terris via*. He felt that he did not belong to that fortunate class of beings whose peculiar privilege it is to perform great enterprises without labor, and to achieve great ends without means. His habits of industry, formed in early boyhood, before, perhaps, he ever dreamed of the destiny that was awaiting him, forsook him only with his existence. His life, in this respect, affords an example which addresses itself to the student of every profession and pursuit in life, which the young man should imitate, and the old man not forget.

The great defect in his character was restlessness, growing, apparently, out of his ardent and impulsive temperament, which never permitted him to pursue any subject very long without becoming tired of it, or panting for a change. His mind required diversity of occupation, just as the stomach, to be healthful, requires diversity of food. Hence, while engaged in the composition of his great work, he could not resist the frequent temptations that presented themselves to divert him from his labors. His delight was to appear before the public,

to deliver a temperance address, to preside at a public meeting, or to make a speech on the subject of internal improvement, or the Bible or missionary cause. For a similar reason, he stepped out of his way to write his letters on Slavery, and his discourses before the Cincinnati Medical Library Association. No man in our land could have done these things better, few, indeed, so well; but, useful as they are, it is to be regretted that he undertook them, because they occupied much of his time that might, and, in the opinion of his friends, ought to have been devoted to the composition and completion of his great work, the ultimate aim and object of his ambition. Like Adam Clarke, he seemed to think that a man could not have too many irons in the fire, and the consequence was that he generally had the tongs, shovel, and poker all in at the same time.

It was the same restless feeling that caused his frequent resignations in medical institutions. Had his disposition been more calm and patient, he would have been satisfied to identify himself with one school, and to labor zealously for its permanency and renown. In moving about so frequently, he induced people to believe that he was a quarrelsome man, who could not agree with his colleagues, and whose ruling passion was to be a kind of autocrat in every medical faculty with which he was connected. But, while his own conduct gave coloring to such an idea, nothing could have been more untrue.

Dr. Drake always cherished a profound respect for Christianity; but it was not until 1840, that he made a public profession of his religious views. He now united himself with the Episcopal Church, of which he remained ever afterwards a devout member. He was strongly opposed to the High Church movements, and spared no pains to counteract what he regarded as its evil influences. Indeed, so much did he have this subject at heart that he was induced, only a few years before his death, to discuss it, at some length, in the Philadelphia Episcopal Recorder, in a series of articles marked by great judgment and ability. They appeared under the sig-

nature of a "Western Layman," and attracted much attention. At the period of his death, he was under an engagement to furnish a series of papers for a new Review, about to be established by the leaders of the Low Church party. He was well read in the Bible, and had no inconsiderable acquaintance with theological literature.

The personal appearance of Dr. Drake was striking and commanding. No one could approach him, or be in his presence, without feeling that he was in contact with a man of superior intellect and acquirement. His features, remarkably regular, were indicative of manly beauty, and were lighted up and improved by blue eyes of wonderful power and penetration. When excited by anger, or emotion of any kind, they literally twinkled in their sockets, and he looked as if he could pierce the very soul of his opponent. His countenance was sometimes staid and solemn; but generally, especially when he was in the presence of his friends, radiant and beaming. His forehead, though not expansive, was high, well-fashioned, and strongly denotive of intellect. The mouth was of moderate size, the lips of medium thickness, and the chin rounded off and well-proportioned. The nose was prominent, but not too large. The frosts of sixty-seven winters had slightly silvered his temples, but had made no other inroad upon his hair. He was nearly six feet high, rather slender and well-formed.

His power of endurance, both mental and physical, was extraordinary. He seemed literally incapable of fatigue. His step was rapid and elastic, and he often took long walks, sufficient to tire men much younger, and, apparently, much stronger, than himself. He was an early riser, and was not unfrequently seen walking before breakfast with his hat under his arm, as if inviting the morning breeze to fan his temple and cool his burning brain.

His manners were simple and dignified. He was easy of access, and remarkably social in his habits and feelings. His dress and style of living were plain and unostentatious. His house was the abode of a warm but simple hospitality. For

many years, no citizen of Cincinnati entertained so many strangers and persons of distinction.

In politics, he was a Whig, and never failed to exercise his elective franchise. During the Presidential canvass of 1840, in which his early friend, the late General Harrison, himself at one time a student of medicine, was the Whig candidate, Dr. Drake evinced a deeper interest, and took a more active part, than he ever did before or afterwards, in any contest of a similar kind. He was the ardent friend of rational liberty throughout the world; and no man ever gloried more in the institutions of his country.

He was naturally conscientious. A desire to execute every trust that was confided to him, promptly and faithfully, formed a prominent trait in his character. He was always unhappy, if, through neglect, inadvertence, or misfortune, he made a failure. This feeling pursued him through the whole of his life. A little incident, of which he himself has furnished the particulars, strikingly illustrates the truth of this remark. One day, when hardly six years old, he was sent to borrow a little salt from one of the neighbors, an article which was then very scarce, and which cost at least twelve times as much then as now. It was a small quantity, tied up in a paper, which, when he was about half way home, tore, and out rushed the precious grains upon the ground. "As I write," says he, "nearly sixty years afterwards, the anguish which I felt at the sight seems almost to be revived. I had not then learned that the spilling of salt was portentous, but felt that it was a great present affliction."

He was a man of extraordinary refinement. This feeling was deeply engrafted in his constitution, and always displayed itself, in a marked degree, in the presence of the female sex. Although his parents were uncultivated persons, and hardly ever mingled in the more refined society, they cherished a high and pure idea of the duty of good breeding. The principle of politeness was deeply rooted in both, and they never failed to practise it in their family and in their intercourse with the world.

To those who are engaged in scientific, literary, and educational pursuits, or in the practice of medicine, it will not be uninteresting to know that Dr. Drake was poor, and, until the last eight years of his life, pecuniarily embarrassed. It was not until after his connection with the University of Louisville that he began to lay up anything from his earnings. His medical journal only brought him into debt. The first volume of his great work sold slowly, and had not yielded him one dollar at the time of his death. Since that period, his son-in-law, Alexander H. McGuffey, Esq., has received, as his literary executor, two hundred and fifty dollars as the balance to the author's credit up to that time. This sum is not more than one-tenth of what he paid for the maps alone contained in the work, and engraved at his own expense. Nothing, in fact, that Dr. Drake ever undertook was pecuniarily profitable. Money-making was not his ambition. His aims were always so lofty, and so far removed from self, that he never thought of money except so far as it was necessary to their accomplishment.

S. D. Gross.

NATHANIEL CHAPMAN.

1780—1853.

THE medical profession of Philadelphia has numbered among its most shining lights a long list of men, born and reared in our Southern States, who, drawn to the metropolitan school for their professional education, have remained among us, and fought their way to eminence. Of the generation that has just passed away, Virginia furnished not a few. Chapman, Horner, Mitchell, and Mütter, whose careers were closed by death within the last decade, were the representatives of a noble stock, for above a century the support of the Philadelphia school of medicine, of which they themselves were among the most illustrious ornaments. The name of Chapman was identified with the history of the University of Pennsylvania for a period of nearly forty years; and after the death of Physick, universal consent placed him at the head of the American profession.

Nathaniel Chapman was descended from an ancient and honorable English family. His paternal ancestor came to Virginia with the very first colony, under the auspices of Raleigh, to whom he was nearly related by blood. He had been a captain of cavalry in the British army, and received a considerable grant of land in the new territory, upon which his distinguished kinsman had just bestowed the appellation of the Virgin Queen.

The old seat of the Chapman family in Virginia is still in their possession, on the river Pamunkey, some twenty miles above Richmond. A branch of the family, about the year

1700, migrated to the adjoining State of Maryland, and fixed itself on the banks of the Potomac, nearly opposite Mount Vernon. They retained the designation of the ancient settlement, and called the new estate Pamunkey. From this branch Dr. Chapman is descended.

His father, however, returned to Virginia upon his marriage, and passed his life there. His wife was of that Scotch stock, of which so many were attracted to Virginia, in the early days of her tobacco trade. She was the daughter of Allan Macrae, of Dumfries, in Virginia, a merchant and tobacco factor, who accumulated a large fortune, which he bequeathed to his children.

Nathaniel Chapman, the second son of George Chapman and Amelia Macrae, was born on the 28th May, 1780, at his father's seat, Summer Hill, in Fairfax County, Virginia, on the banks of the Potomac. The ancient town of Alexandria, then the capital of Northeastern Virginia, was within a few miles of the seat of the Chapmans; and about equidistant stood the future site of Washington. At Alexandria, not many months before the birth of Chapman, in the December of the preceding year, was born another distinguished physician, who for nearly fifty years shared with him the best practice of Philadelphia,—Joseph Hartshorne.

These young men, destined in after-life, in a distant city, to a long career of honorable rivalry, received the foundation of their scholastic education together, at the classical academy of Alexandria, founded by General Washington, and then under the direction of his able and accomplished friend and chaplain, the Rev. Dr. McGrath. Chapman remained here six years. Subsequently, for brief periods, he was an inmate of two other colleges, to neither of which, however, did he consider himself under any obligation.

The academical training of the Alexandria College must have been superior. Hartshorne and Chapman were both distinguished for thoroughness and accuracy of scholarship, and, through life, beyond most of their professional contemporaries,

were remarkable for devotion to general literature and belles-lettres.

At a very early age Chapman commenced the study of the profession which he so long illustrated and adorned. In the year 1797, when but little more than seventeen years of age, he came to Philadelphia, for attendance on the medical lectures at the University of Pennsylvania. For two years previously he had been engaged in a course of preliminary reading, under the guidance of two neighboring physicians, both in their day men of no little note. A year he spent in the office of Dr. John Weems, of Georgetown, afterwards and now of the District of Columbia. Weems, a close friend and near relation of the Chapman family, was a practitioner of much local eminence. From his office, Chapman passed under the care of Dr. Dick, of Alexandria, then and still favorably known in the annals of American medicine.

At seventeen, a stranger, without fortune, connections, or influence, Chapman launched his bark in the crowded metropolis of the United States. At thirty-three, he had reached the front rank of his profession. Seated in a leading chair of the renowned American school of medicine, with the most desirable practice of a great city at his command, an eminent social favorite, distinguished as a wit and conversationalist, he enjoyed a position which left him nothing to desire. A rare combination of qualities had achieved this brilliant success. Energy, industry, professional aptitude, literary attainments had not alone accomplished it; there were moral, no less than intellectual attributes which pushed him forward in the career of fortune.

A winning demeanor, remarkable conversational powers, an address which was the unmistakable pledge of a sympathizing heart,—these were the traits which at once made Chapman troops of powerful friends, and carried him over the heads of able competitors for the great prizes which he so early secured.

Five years before young Chapman first appeared in Philadelphia, another youth from a neighboring Southern State, came

also up to the medical metropolis. Charles Caldwell, of North Carolina, a man of indomitable perseverance and unquenchable ambition, full of talent, zealous for science, and devoted to his profession, started almost side by side with Chapman, an avowed competitor for the high preferment which, with little apparent struggle, fell within the latter's grasp. Caldwell was not without pretensions to the chair of Kuhn and Rush. It had been the object of his life. He tells us in his Autobiography, that when a student, on the benches of Rush's lecture-room, he announced his intention "never to be satisfied, until he was seated in the lecturer's chair, or one equal to it." And so keenly did he feel his failure to obtain it, that, not long after his defeat, he abandoned Philadelphia, to begin a new career in the distant West.

But Caldwell was a man of many faults of temper. Dogmatical, egotistical, controversial, he not only failed to conciliate personal attachments, but he marred his well-earned scientific reputation, by the doubts which he created of his loyalty and judgment. In the ill-concealed spleen with which he notices the election of his rival, he furnishes the interpretation to their respective careers. Chapman, with the modesty of merit, "had the candor to acknowledge that he was more indebted to the friendship of the Trustees than to any other cause." The overweening vanity of the unsuccessful candidate insists, "that the chair was bestowed on his competitor, from the good-will and favor of the Board of Trustees, notwithstanding the almost universal admission that his—Caldwell's—qualifications for it were not a little superior!"*

Upon his arrival in Philadelphia, Chapman became the private pupil of Rush, then in the zenith of his popularity and influence. With Rush he soon made himself a favorite, and there is little doubt that he was early destined by his preceptor for introduction into the University, if not for the succession to the Chair of Practice. Caldwell, it would seem, had previously attracted the notice of the influential professor, but soon lost his favor.

* Caldwell's Autobiography.

The Medical Faculty of the University of Pennsylvania, in the days of Chapman's pupilage, presented an array of names, which, with scarcely an exception, have become historical. Shippen, Wistar, Rush, Barton, and Woodhouse, filled the five chairs, to which the organization was limited.

Shippen, the senior of the Faculty, and one of the founders of the school, had the three branches of Anatomy, Surgery, and Midwifery, with Wistar for his adjunct. Surgery was not a distinct professorship until 1805, when the commanding ability of Physick as a practitioner and teacher of surgical art led to the creation of the additional chair. It was not till 1810, after the death of Shippen, that the claims of Midwifery as an independent practical branch of medicine, were admitted. Shippen, whose brilliant social as well as professional reputation is part of the traditional history of Philadelphia, is described by a student of those days—no friendly critic of the University Faculty, Caldwell,—as “in stature and figure, countenance, and general appearance, and style of manners, one of the most elegant and gentlemanly personages of the times, possessed of an excellent and well-cultivated mind, a polished, and, when excited, an impressive, if not an eloquent public speaker.”

Wistar, then comparatively young, and destined to be the survivor of the Faculty, was the personal favorite of the class. In general education beyond the standard of his day, with a preparatory professional training which an easy fortune had enabled him to prolong at home and abroad, fluent, imaginative, self-possessed, he has probably never been surpassed as a finished and instructive lecturer.

Barton's reputation in Natural Science, gave no little éclat to the school. As a lecturer, in the admission of Caldwell, who showed much rancour to his memory, “he was eminently instrumental in giving to his branch, the respectable rank it holds at present in our Schools of Medicine. Previously to his promotion to the chair of, *Materia Medica*, the lectures delivered from it, in the United States, consisted of very little else than dry details of the names, classes, imputed properties,

doses, and modes of preparation and exhibition of medicinal substances."

Woodhouse, then recently elected to the chair of Chemistry, was distinguished as an experimental chemist. By Priestley, he was pronounced "equal, as an experimenter, to any one he had seen in either England or France." An enthusiast in devotion to analysis, he would doubtless have accomplished something brilliant, but he was cut off by apoplexy at the early age of thirty-eight.

Rush, however, was beyond cavil the bright star of the school, *facile princeps*. His theories have disappeared before the light of modern physiological investigation; but his genius made a lasting impression on the medical opinions of his countrymen, and his ardor, fervor, and faith, were irresistible with his students.

Upon his graduation in the spring of 1800, Chapman presented an inaugural thesis on Hydrophobia, written at the request of Rush, in answer to an attack on the Professor's favorite theory of the pathology of that disease. He had previously prepared an essay on the sympathetic connections of the stomach with the rest of the body. This paper, afterwards read before the Philadelphia Medical Society, contained the germs of Chapman's doctrines regarding the pathology of fever, as well as the *modus operandi* of medicines.

During his pupilage, Chapman found leisure to contribute to periodical literature. About this time, "The Portfolio" was established, under the editorship of the celebrated Dennie. Our young Doctor wrote several articles for this journal, under the signature of Falkland. They refer chiefly to European politics, and are strongly tinged with the anti-Gallican and anti-Bonapartist views, which then pervaded the Federal party of the country, of which the "Portfolio" set were strong partisans.

Chapman did not obtain the advantage of an hospital residence, upon his graduation in Philadelphia. His friend and compatriot, Hartshorne, was more fortunate. "Through the

assistance of his uncles, then influential managers of the Hospital, and of other relatives, Hartshorne was enabled, in 1801, to secure an appointment to the post of resident apprentice and apothecary, then vacant in the Pennsylvania Hospital.* But Chapman, destitute of influence in these quarters, determined to seek the most celebrated schools and hospitals of Europe, with a view to the completion of his medical education.

He remained abroad three years, nearly one of which he spent in London, as a private pupil of Abernethy. This celebrated man had great powers as a teacher, and an unrivalled faculty of impressing the minds of his students. The founder of the Physiological School of Surgery, and the author of a rational constitutional treatment of surgical diseases, he carried his pathological views also into the domain of Medicine. Constitutional disorders, he maintained, either originate from, or are allied with derangements of the stomach and bowels, and can be reached only through these organs. These doctrines probably took no little hold of the mind of his young American pupil. They are traceable throughout his future teachings and writings.

There was something, moreover, congenial in the temperaments of the two men; but Chapman had Abernethy's humor, without a tinge of his coarseness or causticity.

Edinburgh, however, was at this time the medical metropolis of the world; and, in 1801, Chapman went thither for a sojourn of two years. The influence which the Edinburgh medical school had long exerted over the profession of America is forcibly described by Dr. Jackson in his Discourse Commemorative of Dr. Chapman. "The celebrity it had acquired from its Monros, Cullen, Brown, and Gregory, had not been eclipsed by the Paris or German schools, or rivalled by those of London or Dublin. The medical school of the Scotch metropolis was the cynosure of American physicians during the colonial period, and continued to be so until within the last twenty-five years. Most of the eminent medical men of Philadelphia,

* Biography of Dr. Hartshorne.

New York, and Boston, of the latter part of the last century, were its alumni. I doubt whether, at that time, more was known of the European continental schools than the mere existence of two or three of repute. All of the medical doctrines, ideas, principles, and practice of this country were derived from the Edinburgh school, or from English writers. Our knowledge of the works, contributions to science, doctrines, theories, and practice of the French, German, and Italian medical schools and profession, with some very limited individual exceptions, does not date beyond twenty-five or thirty years."

The great ornament of the Edinburgh school, Cullen, had been, at this time, some years dead. But his teachings survived, and, indeed, pervaded not only the British isles, but the North American Continent. Nowhere were they more implicitly received than in our own country. The lectures of Kuhn, who a short time before had occupied the chair of Theory and Practice in the University of Pennsylvania, are described by Caldwell as "strikingly characterized by the doctrines and notions of Cullen, and not a few of them actual copies of his lectures." And "Cullen's First Lines," down to a period within the recollection of many of our older physicians, was the time-honored text-book of the Practice of Medicine in the United States.

The doctrines of Cullen, which are to a certain extent founded upon those of Hoffmann, had effected a revolution in medical theories. They superseded the humoral pathology of Boerhaave, and based diseased action solely upon derangement of the solid organs of the body. The system of Cullen, afterwards rudely simplified by Brown, and again modified by Rush, retained its hold upon the British and American *mens medica*, until the comparatively recent discoveries of chemical analysis revived the old humoral opinions, so consonant with the instincts of mankind. Chapman carried away with him for life the doctrines of the Edinburgh school. He was, to the close of his medical career, in the language of Dr. Jackson, "a most uncompromising vitalist and solidist."

His residence in Edinburgh was agreeable as well as instructive. His pleasant manners and social powers brought him into intimacy with a number of distinguished men, particularly Lord Buchan, Dugald Stewart, and Brougham. He seems to have anticipated the career of Brougham; for, not long after his return to the United States, he republished Brougham's speech before the House of Commons on the British Orders in Council, with a biographical sketch, in which the eminence of the future Chancellor was predicted.

Lord Buchan, the eccentric but warm-hearted friend of America and Americans, paid the young Virginian the compliment of a public breakfast, upon his departure for his own country. The occasion selected was the birthday of Washington, and a large number of distinguished persons, including most of the literary celebrities of the modern Athens, and many of the nobility, male and female, were present. Lord Buchan, at the close of this entertainment, committed to the custody of his young friend an interesting relic, valuable from a double historical association. He had some years previously presented to General Washington a box made from the oak that sheltered Wallace after the battle of Falkirk, with a request to pass it at his death to the man in his country who should appear to merit it best. General Washington, declining so invidious a designation, returned it by will to the Earl, who intrusted it to Dr. Chapman, with a view to its being ultimately placed in the cabinet of the College at Washington, to which General Washington had made a bequest.

Upon his return to the United States, Chapman determined to select Philadelphia as the theatre of his professional career. An offer of partnership in Virginia had been made to him by his old preceptor, Weems. But he chose the wider field, and in 1804 commenced the labors of his profession in Philadelphia. His success was immediate; and for a period of nearly fifty years he commanded whatever he could attend of practice in the most refined and opulent circles of our city.

As a practitioner, his qualifications were unrivalled. The charm of his manner was no less effective in the sick-chamber

than his skill in distinguishing and relieving disease. His lively conversation and ever-ready joke were often more soothing than anodyne or cordial; and when roused by urgent symptoms, he was unequalled in resources, as he was devoted in attentions. As a consulting physician, his great powers were particularly conspicuous. Rapid and clear in diagnosis, inexhaustible in therapeutics, self-relying, never discouraged, never "giving up the ship," he was the physician of physicians for an emergency.

At the bedside, Chapman dismissed speculative theories of morbid action. His remedies were drawn from observation and experience; and no man wielded more dexterously and successfully the known resources of his time. In our day, a less depressing therapeutics has come into fashion, and the means of combating disease are doubtless more numerous than those which were in Chapman's hands. But,

"Take him for all in all,
We shall not look upon his like again."

He was singularly indifferent to the emoluments of his profession. Careless in his accounts, resolute in refusing bills to his numerous family connections and personal friends, always moderate in his charges, he realized scarcely a tithe of the receipts which some of his successors in fashionable practice have rolled up. No more generous or less covetous man ever lived.

Public teaching early attracted Chapman's aspirations. Very soon after his return from Europe he gave a private course on Obstetrics, a branch which had then merely a nominal place in the lectures at the University. His success led, in 1807-8, to a connection with James, already known as a teacher of Obstetrics. In 1810, the Professorship of Midwifery in the University was conferred upon James, with an understanding that he should be assisted by Chapman. His introduction into the University was now fixed; but an independent chair was not placed within his reach until, in 1813, the death of Rush occasioned a rearrangement of the school.

Barton, who had long filled the chair of *Materia Medica* with distinguished éclat, was induced to exchange it for that of the Theory and Practice; and the former chair, thus made vacant, was conferred upon Chapman.

The transfer of Barton to a department which was congenial neither to his taste nor studies, could scarcely have promoted the interests of the University, or his own reputation. His health, too, proved unequal to the new demand upon his mental exertions; and the hereditary gout, to which he had long been a martyr, aggravated into hydrothorax, in less than three years terminated his life.

During the brief period in which Chapman occupied the chair of *Materia Medica*, his courses were eminently satisfactory to his classes. Dr. Jackson considers them "an advance on those of his predecessor," and Caldwell bears strong testimony to his success.

His lectures were afterwards embodied in his "*Elements of Therapeutics and Materia Medica*," a work justly pronounced by Dr. Jackson to have been "the best treatise in the English language on those subjects at the time of its publication."

In this work, the articles of the *Materia Medica* are treated in their character of remedial agents, and with chief reference to their employment in the treatment of diseases,—a method afterwards adopted by many of the French writers, especially by Trousseau and Pidoux, in their brilliant *Treatise on Therapeutics*.

Chapman's *Therapeutics* is an original work—original in its plan, original in its execution. As a text-book, it is of course superseded by later publications; but the American student will do well not to "lay it on the shelf." The chapter on *Emetics* will never be obsolete.

The solidist doctrines of the day were adopted by Chapman in explanation of the *modus operandi* of medicines. Their absorption into the blood had scarcely yet been demonstrated by physiology; and the principle of SYMPATHY, which he employed to account for morbid action, he applied also to the explanation of medicinal impressions. But, with singular

candor, when Magendie's experiments on the absorption of medicines were announced, Chapman "engaged Drs. Coates, Lawrence, and Harlan to repeat them at his expense;" and, upon their confirmation, although he made no public recantation of his views, he would never permit the publication of another edition of his work. It had already gone through seven editions, one of them surreptitious; and "when still in great demand, the author refused to have it reprinted, because he thought it required a thorough revision."*

The great event of Chapman's life was his appointment, in 1816, to the chair of the Theory and Practice of Medicine and Clinical Medicine, in the University of Pennsylvania. He filled it for more than a third of a century with distinguished success; and left it with a national reputation.

His lectures were enriched with varied erudition; in style forcible and terse. His medical opinions, accordant in the main with the approved dogmata of his time, were in much original. His practical precepts were judicious and impressive.

As a lecturer, he is well portrayed by his colleague, Dr. Jackson, "as self-possessed, deliberate, and emphatic. Whenever warmed with his subject, his animation became oratorical. Often the tedium of dry matter would be enlivened by some stroke of wit, a happy pun, an anecdote, or quotation. He was furnished with stores of facts and cases, drawn from his own large experience and observation, illustrating principles, disease, or treatment, under discussion. His bearing was dignified, his manner was easy, and his gestures were graceful. He had a thorough command over the attention of his class, with whom he always possessed an unbounded popularity. His voice had a peculiar intonation, depending on some defect in the conformation of the palate, that rendered the articulation of certain sounds an effort. The first time he was heard, the ear experienced difficulty in distinguishing his words. This was of short duration; for once accustomed

* Manuscript letter of Dr. Chapman.

to the tone, his enunciation was remarkable for its distinctness. Students would often take notes of his lectures nearly verbatim."*

Chapman's leading theory of medicine was comprised in the great principle, SYMPATHY. His predecessor, Rush, refining on the solidism of the Scotch school, had reduced all diseases to a unit,—considering them to be mere expressions of different states of excitability and degrees of excitement. Chapman "recognized the differences in the vital endowments of the tissues and organs, and the diversities of pathological conditions." He restored the classification of diseases, which Rush had discarded. Adopting the prevailing anti-humoral views, he refused, however, to deny the obvious and well-defined varieties in the manifestations of disease; and skillfully expanded his theories to include them.

In his teachings, exclusive contemporaneous dogmata were enlarged and generalized; and his practical tact never permitted them to lead him to unsound therapeutical deductions.

His scheme of therapeutics stands the test of time. It is essentially the same as was taught by his distinguished successor,—modified, indeed, by the discoveries of modern chemistry, but in the main unshaken by physiological and pathological revolutions.

In the spring of 1850, the decline of health and physical powers led Dr. Chapman to abandon the field of labor which he had so long and brilliantly occupied. He resigned his chair, and withdrew from practice and society. For three years, he survived, in the seclusion of his family; slowly and almost imperceptibly, without apparent disease, by gentle and gradual decay, passing to the other world. His death took place on the 1st of July, 1853.

The highest complimentary distinctions, which his professional brethren could accord, had been paid Dr. Chapman. He was for many years President of the Philadelphia Medical Society; and was by acclamation, in 1848, elected first Presi-

* Dr. Jackson's Discourse.

dent of the American Medical Association. Many medical and learned societies of Europe also enrolled him among their members.

One of the honors which he most appreciated was the Presidency of the American Philosophical Society, in which Franklin, Jefferson, Wistar, Tilghman, and Duponceau had preceded him. This he held at his death.

In addition to his courses at the University, Chapman, for a long period, gave clinical lectures at the hospital of the Philadelphia Almshouse. He, moreover, for upwards of twenty years, delivered a summer course of lectures in the Medical Institute, of which he was the founder.

Chapman's personal popularity was not inferior to his professional position. His temperament was cast in the happiest mould. Social in disposition, with an unfailing gaiety of spirit, a wit—a punster—delightful as a companion, and enjoying company, he, for a generation, occupied a position unrivalled in the society of Philadelphia. To these brilliant qualities, he united the kindest feelings and the gentlest temper. He was utterly without malice; frank, open-hearted, and open-handed.

His jokes and puns are familiar in our Philadelphia ears as household words; and those who enjoyed the charm of his society will not soon forget his cordial, blithesome manner, and his bright, cheery look.

Dr. Chapman's published writings are numerous. His "Therapeutics" has been alluded to. Many of his lectures appeared in the "Medical Examiner" of Philadelphia, in the years 1838, 1839, and 1840, and were afterwards re-issued with others, in separate form. The published lectures comprise the following subjects, viz.: Eruptive Fevers, Diseases of the Thoracic Viscera, Fevers, Dropsy, Gout, and Rheumatism. A Compendium of his Lectures was also published by Dr. N. D. Benedict.

In 1820, Dr. Chapman commenced the publication of "The Philadelphia Journal of the Medical and Physical Sciences," which he continued to edit for many years. This Journal,

continued to the present day, under the name of "The American Journal of the Medical Sciences," is now well known throughout Europe and America as the oldest and first of American medical journals.

In 1808, Chapman published a work entitled "Select Speeches, Forensic and Parliamentary," with critical and illustrative remarks, in five octavo volumes, which excited much attention.

In 1804, Dr. Chapman contracted a matrimonial alliance, from which he derived unalloyed happiness. His wife, Rebecca Biddle, daughter of Colonel Clement Biddle, of the Revolutionary Army, an intimate friend and confidential correspondent of Washington, still survives him.

The following beautiful tribute to Dr. Chapman, is from the pen of his friend, the late Dr. J. K. Mitchell, distinguished in poetry and general literature, no less than in medicine. A biographical notice of Chapman could not be complete without it.

TO N. CHAPMAN, M.D.

DEAR Doctor, though I hae the will,
I fear I want poetic skill
To do ye muckle credit;
But yet I'll imp my youthfu' wing,
And o' my guid preceptor sing,
Though ye y'ersel may dread it.

I've often wished for Burns's pen,
And thochts frae Ramsay's fairy glen,
To do ye fitting honor;
But tak the will and no the deed,
My muse, the jade, awa will speed,
Sae I maun e'en get on her.

Ah! weel I mind when first I saw
Ye laying down the morbid law
O' nature to the student;
To dry detail and dusty lore,
Brocht frae y'r inexhausted store,
A new enchantment you lent.

Frae worthies o' the sudden time,
To those wha yet were i' their prime,
Ye drew y'er rich resources;
And last, not least, frae y'er ain sel,
Baith thochts and words o' magic spell
Adorn'd y'er ripe discourses.

Wi' easy grace and potent sense,
Clear order, a' without pretence,
And learning without show, sir,
Ye charm'd the eye, and pleas'd the ear,
And made y'er thochts sae richly clear,
The darkest truth did glow, sir.

But faith, I scarce believed my eyes;
Ye took me, sir, wi' sair surprise,
When mang y'er friends I saw ye
Let loose the wit by science chain'd—
Humor that nae ane ever pain'd—
Oh! thus I'd like to draw ye!

They little ken ye wha has known
Y'er science and y'er skill alone,
Though they are mair than ample;
The racy pun, rich repartee,
The gushing joke frae malice free,
Wad na complete the sample.—

But better far, a heart that ne'er
Did o'er a human ill forbear
To heave a feeling sigh,
That readily forgave a foe,
And never dealt a jealous blow,
In keenest rivalry.

Mair I might say, but this I fear
E'en frae a friend ye'll hardly bear,
Sae I'll nae mair offend ye;
Though if ae man beside y'ersel
Says that the truth I dinna tell,
That man has never kenn'd ye.

J. B. BIDDLE.

LEWIS C. BECK.

1798-1853.

LEWIS C. BECK was a younger brother of John B. and Theodric Romeyn Beck, whose memoirs accompany the present volume, and whose names are indelibly associated with the medical history of the United States. He was born on the 4th of October, 1798, at Schenectady, New York, a few months after the death of his father.

His early talents were much like those developed in riper years: great exactness, mechanical genius, and extreme neatness in finishing whatever he undertook. In manhood he was distinguished for decision and firmness. For the habit of systematizing his labors and pursuits, it is probable that he was much indebted to the early training of his mother, who lived to see all her sons established in fixed habits of industry, occupying high and responsible stations in society, and alike distinguished for their sound moral principles. Mrs. Beck was blessed with a well-balanced mind, strongly fortified with energy and firmness, and it is believed that from her the sons inherited most of their talents. She lived to the advanced age of eighty-five years, and died at the residence of her son, T. Romeyn Beck, at Albany, in August, 1853.

Dr. Beck received his rudimentary education at the grammar school in Schenectady; and entering Union College quite young, he finished, it is believed, his course in 1815, graduating as Master of Arts. He pursued the study of medicine with Dr. Thomas Dunlop, of Schenectady, and was admitted to the practice in February, 1818, when less than twenty years of age. Settling in his native city, he remained there until the

autumn of 1819, when, at the solicitation of his brother, he removed to St. Louis.

Shortly after reaching that city, he conceived the idea of writing a *Gazetteer of Illinois and Missouri*, and he accordingly set to work collecting materials, making excursions through different regions, by land and water, not neglecting, as he passed along, the botany, geology, and mineralogy, the climate, and the habits of the people. In fact, he kept a faithful record of whatever seemed to him of interest, as he had previously done in his journey from New York to the West. His wanderings in Illinois and Missouri occasionally brought him in contact with a curious specimen of humanity, causing him, very naturally, to indulge in moral and philosophical reflections. Thus, he remarks: "I was struck with a fact somewhat new to me, viz., the kind of romance with which a solitary life in the woods seems to be invested. I have recently met with two or three individuals who were formerly in the enjoyment of ease and affluence, but who, on suffering reverses, have taken up their abode in the wilderness, and live upon the coarsest fare, and in the rudest manner. In one instance, this mode of life had been followed for ten or twelve years, and the individual had seldom, during that time, enjoyed such society as he had been formerly accustomed to. I am inclined to believe that it is much more easy for civilized man to relapse into a state of savageism, than for the savage to become civilized."

After returning to St. Louis he was industriously engaged, for nearly the entire year of 1820, in collecting materials for his "*Gazetteer*," in examining the Potosi lead mines and its associated minerals, and in visiting the Salines, near Herculaneum. The botany of this region yielded him a most abundant harvest. He found the plants of the West, at the time of his visit, entirely new to him.

To show that he had enlarged views of the usefulness and importance of commerce, and that he could readily turn his mind and pen to other pursuits than the cultivation of the knowledge of natural history, we quote from his narrative

again: "In addition to my other occupations, I prepared several articles for the St. Louis papers on various subjects. Perhaps the most important of them was a short series on the construction of a canal between Lake Michigan and the Illinois."

At the close of the year 1820, he visited New York on matters of business, journeying on horseback, and making, as usual, observations of a scientific character. "In travelling," he says, "through a variety of woodland and prairie, I was struck with the contrast in regard to the temperature of the atmosphere. In winter it is much warmer in the timber land than in the prairies, and in the summer the reverse is the case. The reason of this seems to be, that in winter the forest is shielded from the blasts which sweep through the prairies like so many flues or funnels. On the other hand, in summer the timber prevents the sun from acting on the surface; whereas the prairie is fully exposed to the sun's rays, and thus becomes thoroughly heated." Of the febrile diseases which prevailed in the country at that time, intermittent and bilious, he regards the annual inundations of the streams, followed by a dry season, as the cause.

In the autumn of 1821, he published in the "Albany Daily Advertiser," a series of articles on Mr. Henry Schoolcraft's *Travels to the Sources of the Mississippi*. It seems that these articles were strictures or criticisms, pointing out several inaccuracies and defects. Mr. Carter, the editor of "The Statesman," and a personal friend of Mr. Schoolcraft, if not pecuniarily interested in his work, replied to the strictures; and judging from the remarks of Dr. Beck, in connection with this subject, I should infer that the controversy was carried on with much warmth, if not positive acrimony. After making what may be regarded as an apology for his attack on Mr. Schoolcraft's work, he concludes his remarks made in 1851, as follows: "As the preparation of these articles was of great service to me at that early period, so I have reason to believe that their appearance eventually had a good effect upon the author of the 'Travels.'" Mr. Schoolcraft's subsequent

works were prepared with more care, and many of them were very creditable to him.

This incident in the life of Dr. Beck is well calculated to show his early devotion to the cause of truth and science, and his early habit of thinking and acting independently.

In September, 1821, he revisited St. Louis, having been called thither by the death of a beloved brother, a highly promising member of the bar. After a brief sojourn there, however, he finally bid adieu to the West, and returned to Albany, New York. "I yielded," says he, "to the solicitations of my friends, and especially of my mother, and forever gave up the prospect of successful adventure in a part of the country which seemed to promise a rich reward to industry and enterprise. The rich harvest, too, which its natural history presented, and which I had, as it were, just began to gather, made me regret the necessity which seemed to be laid on me to return."

During the summer and autumn of 1822, he finished his *Gazetteer of Illinois*, a volume of 352 octavo pages, upon which he had bestowed nearly three years of labor, and also a considerable outlay for engravings. He now also commenced the practice of medicine at Albany; wrote essays, and read the proof-sheets of an edition of *Eaton's Botany*; delivered a short course of lectures on Botany before the Albany Institute; and made some scientific excursions.

In the latter part of the summer of 1824, he delivered a course of lectures at the Berkshire Medical Institution, on Botany; his colleagues being John P. Batchelder, Henry H. Childs, John Delamater, Jerome V. C. Smith, Stephen W. Williams, and Chester Dewey. In September of the same year, Lafayette visited Albany, and was received and escorted to Troy by the Military Association, of which Dr. Beck was a member. He participated in the celebration of that most brilliant pageant; an event worthy of lasting remembrance, and one which, as he remarks, "was a sublime exhibition of a nation's gratitude." On the 25th November, 1824, he was appointed Junior Professor of Botany, Mineralogy, and Zoology,

in the Rensselaer School. Amos Eaton, Esq., who was the projector of the school, was the Senior Professor. The late Stephen Van Rensselaer furnished the pecuniary means for founding it, and sustained it for many years. Its object, in the language of Mr. Van Rensselaer, was "to instruct persons, who may choose to apply themselves, in the application of science to the common purposes of life."

It is hardly necessary to say that the labors and services of Mr. Eaton and Dr. Beck, in diffusing practical instruction in the natural sciences, received an impulse of the greatest importance to the citizens of the State of New York. Many of our most able and successful teachers of the natural sciences have been educated at this school. Dr. Beck says: "The principal peculiarity of the school, that of making the student act as a teacher—obliging him to arrange the illustrations for his lecture, and to deliver it to the Professor—worked admirably with the class who came to us." Nevertheless, he thought the course was not sufficiently extended, and too general and comprehensive to be fully carried out in a single year. He observes: "The effect, I feared, would be to make superficial men—mere smatterers in science. Mr. Eaton thought differently."

In 1824, he wrote and published two or three scientific papers, as will be seen by consulting the general bibliographical list. In July, 1825, he delivered the Anniversary Address before the Pi Beta Phi Society of Union College, of which he had been a member for many years.

On the 17th of October, 1825, Dr. Beck was married to Hannah Maria Smith, daughter of Israel Smith, Esq., of Albany, by whom, I believe, he had seven children, one of whom died in infancy. Of the six now living, there are three sons and three daughters, all well educated and highly respectable. Mrs. Beck, an exemplary Christian and an amiable and accomplished lady, still survives.

In November, 1825, a project of getting up a medical school in Troy, New York, was started by some of the physicians and citizens of that place. Dr. Beck was elected Professor

of *Materia Medica*. It appears that the enterprise did not meet with much patronage or favor, and consequently but a single incomplete course was given, when it was abandoned.

In the summer of 1826, he was elected Professor of Botany and Chemistry in the Vermont Academy of Medicine. His colleagues were Theodore Woodward, Jonathan A. Allen, William Tully, Alden March, and Solomon Foot, afterwards United States Senator from Vermont.

In April, 1827, he delivered a short course of lectures on chemistry, at Middlebury College, Vermont. He also made and published a chemical examination of mineral water obtained on boring, by Messrs. Boyd & McCulloch, of Albany. At the depth of 250 feet from the surface, a stream of what appeared to be carburetted hydrogen gas issued from the opening, and at the depth of about 480 feet, a mineral water was obtained, whose sparkling appearance and peculiar taste seemed to resemble some of the Saratoga Spring waters.

Besides writing two or three scientific papers during this summer, he gave a short course of lectures on Botany, at the Fairfield Medical College, New York. In 1828, he resided at Albany, and when not engaged in lecturing at Castleton and elsewhere, he wrote papers on scientific subjects. In 1829, he gave up his professorship in the Rensselaer School, reviewed Turner's Chemistry, studied the ferns and mosses of the United States, and lectured at Castleton. The year 1830 was spent at Albany, being "engaged in various scientific operations." In July, 1830, he was elected Professor of Chemistry and Natural History in Rutgers College, New Brunswick, New Jersey, but did not enter upon his duties until 1831. He now prepared a text-book on Chemistry, which was published by Messrs. Webster & Skinner, Albany. In the months of May and June he gave his first course of lectures at Rutgers College, and was also appointed Lecturer on Chemistry in the Albany Academy. Besides giving the usual course of lectures at the Vermont Academy of Medicine, he taught some of the branches of natural history in the Vermont Classical Seminary at Castleton.

The year 1832 was full of incidents; and from its marking the first appearance of the cholera in the United States, will long be remembered. This year he published his "Researches on the Commercial Potash of the State of New York."

The first case of Asiatic cholera which appeared on this continent was reported to have occurred at Quebec, Canada, June 8th, 1832. In the early part of July it made its appearance in Albany, New York. The population was excited and alarmed, and so great and dreadful was the anticipated scourge, that it induced Governor Throop to call a special meeting of the Legislature, in order to devise the most effectual means of protection and relief to the people. By an act passed at this extra session, June 22d, 1832, entitled "An Act for the preservation of the public health," the Governor was clothed with extraordinary authority to meet any contingencies which might occur. On the 11th of July, Dr. Beck was appointed by the Governor a commissioned agent to visit the portions of the State northward and westward, and to procure information in relation to the existence, origin, progress, spread, prevention, and treatment of this dreaded disease. After discharging these responsible duties promptly and efficiently, he returned to Albany, prepared his report on cholera, and communicated the same to the Governor. The report was published in the newspapers of the day, and afterwards, in the Transactions of the New York State Medical Society. It embraced the following topics: 1st. The nature of the disease. 2d. Geographical march and mode of extension of the disease on this continent. 3d. Causes of the disease. 4th. Sanitary regulations. 5th. Treatment of the disease.

In May, 1832, he resigned his professorship in the Vermont Academy of Medicine. He says: "I took this step with much reluctance. This was my first important appointment. I was attached to the school, and had reason to believe that my instructions were well received." The writer can bear willing testimony to the full truth of the above statement. The reasons which impelled him to take this step need not be stated. Suffice it to say that to his mind they were deemed

sufficient; and whether he erred in judgment or not, it is believed that he was governed by conscientious principles in the decision that led to his separation from us.

In 1834 and 1835, he wrote a prize essay, or a short series of lectures on scientific subjects. The premium was offered by Hon. James Wadsworth, of Monroe County, New York, and awarded by a committee, consisting of Hon. John A. Dix, Hon. John C. Spencer, and Hon. Benjamin F. Butler.

In April, 1836, an act was passed by the Legislature of the State of New York, appropriating \$104,000 "To provide for a Geological Survey of the State." I believe the Hon. John A. Dix, then Secretary of the State of New York, presented the subject to the Legislature in his annual report. The credit of making the suggestion, and of preparing the working plan, is mostly due to his late brother, Theodoric Romeyn Beck, M. D. Hon. William L. Marcy, then Governor of the State, appointed Dr. Lewis C. Beck, on the 2d of June, 1836, mineralogist of the survey.

Provided with a general letter of introduction by Governor Marcy, his first geological excursion on the survey was commenced on the 24th June, 1836, and was extended to the southern part of the State. His assistant was the late William Horton, of Orange County, New York. In examining the minerals of different parts of the State, from this period till the 1st of October following, he travelled 2412 miles.

In October, 1836, he commenced a course of lectures at the New York University, which was to continue for six months.

During the year 1837, he was employed in giving his usual course of instruction at the New York University, and in preparing his annual report. His investigations led him to travel that season 3180 miles. It was this year that the duties of his survey were so extensive and arduous that he was obliged to give up his course of lectures at Rutgers College. They were resumed in 1838, and continued up to his death. In prosecuting his mineralogical survey, he travelled this year 2433 miles.

The report of this year's labors for the State was communicated, January, 1839, to Hon. William H. Seward, then Governor of the State.

In 1839, he went through various portions of the State not hitherto explored, and travelled the distance of 2535 miles. He also prepared and published a paper entitled, "Notice of Native Copper," and, as usual, lectured at Rutgers College.

The early part of the year 1840 he spent in the examination of the minerals collected in his various excursions. In the latter part of the season, he made another excursion of observation through the western part of the State. He visited the salt-works at Syracuse, in company with Mr. Spencer, the superintendent, and gave advice in regard to some difficulty in the manufacture of salt.

On the 28th April, 1840, he was elected Professor of Chemistry and Pharmacy in the Albany Medical College, his colleagues being Drs. Alden March, James McNaughton, Ebenezer Emmons, James H. Armsby, David McLaughlin, and Thomas Hun, with Amos Dean, Esq. In 1841, the State survey was continued, and he travelled, in the discharge of the duties of his office, 1418 miles. During the grand total of six years' service in the State survey, he travelled 14,606 miles.

The portion of 1842 not spent in giving his annual courses of lectures at Rutgers College, and at the Albany Medical College, was employed in preparing his final report for publication. The report comprises, Part I, Economical Mineralogy, and Part II, Descriptive Mineralogy, being illustrated with 533 woodcuts, exhibiting the crystalline forms of the minerals described. Some idea may be formed of the amount of labor bestowed, and time consumed, in completing this important and valuable work, when we state that it contains 536 quarto pages, besides many quarto plates, and the large number of cuts above stated.

A few quotations from the diary of the mineralogical survey, and we shall have completed our abstract of one of the most

laborious and useful services ever rendered to the public by Dr. Beck.

He remarks: "In regard to the Mineralogy of New York, I can only say that it cost me nearly seven years of arduous labor. I commenced the work with a zeal arising from a fondness for the pursuit in which I was engaged, and with a desire to make my researches useful to the people of the State, who had made such a liberal appropriation for their completion."

The system and order, and the conscientiousness and fidelity of Dr. Beck may be gathered in some measure from the following. "One thing perhaps deserves to be particularly mentioned, as it may be of use to those for whom this MS. is principally intended. I refer to the system and order which I introduced into every part of my work. Before I commenced my examinations in 1836, I had collected and properly registered in a book, all the facts previously published in regard to the Mineralogy of New York. After this, the work of each day, whether at home or abroad, was regularly posted up. I felt it my duty to leave on paper from day to day, a full account of my operations, so that, if at any time I should be prevented from continuing the work, all that I had done could be made available in the completion of the plan. In all this, I only pursued the mode which I had uniformly adopted in the various researches in which I have been engaged." In conclusion he adds: "I desire to give thanks to a kind Providence, for having preserved my health and life amidst many dangers and exposures. And if the work, which was the result of so much solicitude, shall be in any degree useful to my fellow-men, to His sustaining power must all the merit be ascribed."

From this date up to the period of his death, in 1853, he was regularly engaged in giving his lectures at the two colleges with which he was so long connected, and in preparing literary and scientific papers for the press, as will more fully appear in the general list of his publications.

*List and Titles of Literary and Scientific Books and Papers,
published and unpublished.*

1st. A series of articles, published in the Albany Daily Advertiser, 1821, criticising the Travels to the Source of the Mississippi, by Henry R. Schoolcraft.

2d. Facts relative to a Disease generally known by the name of Sick Stomach, or Milk Sickness. Communicated in a letter to John B. Beck, M. D., and published in the New York Medical and Physical Journal, 1822.

3d. A Gazetteer of Illinois and Missouri: containing a general view of each State, and a particular Description of their Towns, Villages, Rivers, &c. &c. January 1st, 1823.

4th. In connection with Mr. James G. Tracy, a Description of a new species of Ranunculus, with Remarks. New York Medical and Physical Journal, vol. ii, 1823.

5th. An examination of the Question whether the Climate of the Valley of the Mississippi, under similar parallels of latitude, is warmer than that of the Atlantic Coast. See New York Medical and Physical Journal, vol. ii, September, 1823.

6th. An account of the Small-pox, Modified Small-pox, and Chicken-pox, which prevailed in the City of Albany, during the months of February, March, and April, 1824; with Remarks upon the Identity of these Diseases, and upon the Anti-Variolous Power of Vaccination. New York Medical and Physical Journal, vol. iv, March, 1825.

7th. An elaborate paper, unpublished, entitled Lead and Lead Mines, including a minute Account of the Lead Mines of the Western States.

8th. Contributions towards the Botany of the States of Illinois and Missouri. Published in Silliman's Journal of Sciences, November, 1825.

9th. An Account of the Salt Springs at Salina, Onondaga County, State of New York; with a Chemical Examination of the Water, and of the several varieties of Salt manufactured at Salina and Syracuse. New York Medical and Physical Journal, June, 1826.

10th. A Review of An Epitome of Chemical Philosophy; being an extended Syllabus of the Lectures on that subject delivered at Dartmouth College; and intended as a Text-book for the Students. By James Freeman Dana, M. D.

11th. Notice and Chemical Examination of the Mineral Water recently discovered in the City of Albany. Read before the Albany Institute, March 8th, 1827.

12th. General Views of the Formation of Phosphuretted Hydrogen. Published in the New York Medical and Physical Journal, vol. vi, 1827.

13th. A Scale of Chemical Equivalents. In connection with Prof. Joseph Henry; 1827.

14th. On the Nature of the Compounds usually denominated Chlorides of Soda, Lime, &c.: with Remarks on their Uses as Disinfecting Agents. New York Medical and Physical Journal, vol. vii, November, 1828.

15th. During the year 1828, the following Notices or Reviews of scientific works were published in the New York Medical and Physical Journal. On the Atomic Theory of Chemistry. By John Fitch, M.C.S.

16th. Electro-Magnetism; being an arrangement of the principal facts hitherto discovered in that Science. By Jacob Green, M. D.

17th. Tables in Illustration of the Theory of Definite Proportions. By Wm. Thomas Brande, F. R. S.

18th. A New System of Chemical Philosophy. Part First of vol. ii. By John Dalton, F. R. S.

19th. During the year 1828, published in the first volume of the Transactions of the Albany Institute, a paper On the Geographical Botany of the United States.

20th. In the first volume of the new series of the New York Medical and Physical Journal, 1829, a short Review of the Elements of Chemistry, including the Recent Discoveries and Doctrines of the Science. By Edward Turner, M. D.

21st. Catalogue of the Ferns and Mosses of the United States. Published in Silliman's Journal. 1829.

22d. On the Office of the Nitrogen of the Air in the process of Respiration. Published in Silliman's Journal of 1830, and also in the New York Medical and Physical Journal.

23d. A Manual of Chemistry: containing a condensed view of the present state of the Science, with copious references to more extensive treatises, original papers, &c. Intended as a text-book for medical schools, colleges, and academies. Published in 1831.

24th. Researches on the Commercial Potash of the State of New York. Published in Silliman's Journal. 1832.

25th. Report on Cholera, made to his Excellency Governor Throop. August, 1832.

26th. Botany of the Northern and Middle States; or a Description of the Plants found in the United States, north of Virginia; arranged according to the Natural System. With a Synopsis of the Genera according to the Linnæan System, a Sketch of the Rudiments of Botany, and Glossary of Terms. Published in 1833.

27th. A Short Series of Elementary Lectures on Chemistry, Electricity, and Magnetism, and the Application of Science to the Useful Arts; intended for the use of Schools. A premium of \$120 was awarded to the author by Hon. John A. Dix, the late Hon. John C. Spencer, and Hon. Benj. F. Butler, to whom the paper was referred by James Wadsworth, Esq., of Monroe County, N. Y., the projector and patron of this mode of extending the arts and sciences among all classes of citizens. 1834 and 1835.

28th. The Laboratory of Nature. Two numbers of an expected series of papers under the above title appeared in the March and April Nos., 1835.

29th. Notes on the Tornado which occurred in New Jersey on the 19th of June, 1835. Published in the New Brunswick Times.

30th. Also, Notes on the New Brunswick Tornado, or Water Spout, of 1835. Published in Silliman's Journal, January and April, 1839, vol. xxxvi.

31st. In the winter of 1835 and 1836, two lectures were

prepared and delivered, constituting part of a popular course for the students of the University of New York and the citizens generally, on "The influence of changes in the atmosphere upon the human system;" and on "The means, both natural and artificial, by which the human system is protected against injury during atmospheric vicissitudes."

32d. Notices of Native Copper, Ores of Copper, and other Minerals found in the vicinity of New Brunswick, New Jersey. Published in Silliman's Journal, 1839.

33d. Mineralogy of New York, comprising detailed descriptions of the Minerals hitherto found in the State of New York, and Notices of their Uses in the Arts and Agriculture. Published by the State in 1842.

34th. Notices of some Trappean Minerals found in New York and New Jersey. Published in Silliman's Journal, vol. xlv, 1842.

35th. On some Pseudo-morphous Minerals of the State of New York. Published in the report of the meetings of the Association of American Geologists and Naturalists, 1843.

36th. Remarkable example of the Force of Expansion and Contraction, exerted by bodies when subjected to alternations of Temperature; with a reference to the question whether the freezing-points of liquids is influenced by differences in pressure. Silliman's Journal, vol. xlv, June, 1843.

37th. Views concerning Igneous Action, chiefly as deduced from the Phenomena presented by some of the Minerals and Rocks of the State of New York. Silliman's Journal, vol. xlv, March, 1844.

38th. Adulterations of various Substances used in Medicine and the Arts, with the means of detecting them; intended as a Manual for the Physician, the Apothecary, and the Artisan. New York, 1846.

39th. A new edition of Botany of the United States, north of Virginia; comprising Descriptions of the Flowers and Fern-like Plants hitherto found in those States. Arranged according to the Natural System. With a Synopsis of the Genera, according to the Linnæan System, a Sketch of the

Rudiments of Botany, and a Glossary of terms. New York, 1848.

40th. Researches in Regard to the Breadstuffs of the United States, their Adulteration, &c., under the direction of Hon. Edmund Burke, Commissioner of Patents. Published at Washington, in a volume labelled "Breadstuffiana." 1848.

41st. Sir Humphrey Davy and his Times. This lecture, which proved to be his last literary work, was written the February preceding his death, and was to have been delivered in Hope Chapel, N. Y., for the benefit of a church struggling with poverty; but, by a violent storm, he was prevented from fulfilling his engagement. It is quite a voluminous manuscript; and it is thought by his friends that the labor of preparing it, in his then feeble state of health, hastened the fatal termination of his disease.

To the above list should be added some ten or twelve manuscript papers, found labelled "Religious MSS.," as indicated by the following titles, viz.: 1st. Claims of Religion upon Science. 2d. Occasional Thoughts, No. 1. 3d. Thoughts, No. 2. 4th. Sketches of Sermons, No. 1. 5th. Sketches of Sermons, No. 2. 6th. Sketches of Sermons, &c., No. 3. 7th. Sketches of Sermons, &c., No. 4. 8th. Select Scraps. 9th. Brief of an Address on Temperance and Intemperance. 10th. Temperance the Work of the People. 11th. Intemperance the Grand Obstacle to the Advancement of Knowledge and Religion.

Dr. Beck was either a regular or an honorary member of a number of literary and scientific societies, both in Europe and in this country; and with the officers and members of most of them he was a correspondent. These letters, as well as many others from distinguished literary and scientific gentlemen of all professions, and of various pursuits of life, from the statesman, the politician, the naturalist, the philanthropist, even to the scientific mechanic, amounting to over 300, are finely preserved in two quarto volumes, labelled "Autographs."

We also find five volumes of scrap-books, labelled "Per-

sonal and Scientific," "Personal and Family," "Scientific and Obituary."

There is indisputable evidence for believing that Dr. Beck was a truly religious man. In 1831 he made a public profession of his faith, and from that time dedicated himself unreservedly and untiringly to the cause of Christianity. He left several manuscripts on religion, all of which speak eloquently of his fervent piety, and the sincerity of the vows he had assumed.

From a long personal acquaintance with Dr. Beck, both in business and social relations, from his own recorded testimony of his interest in religion, and from the statements of others, who were ably calculated to judge of the truth and durability of his professions, we have every reason to believe that "his path was that of the just, shining brighter and brighter."

As he approached the termination of his earthly career, he viewed the advent of death with composure, and looked forward so hopefully to his eternal future, that we may well feel assured of the fulfilment of his prayer: "And when I shall have done with the things of time and sense—when the hour of death shall come, Lord sustain and support me. Walk with me through the dark valley, and finally welcome me with the blessed plaudit, 'Well done, good and faithful servant, enter thou into the joy of thy Lord.'"

Having noticed some of the most important incidents in the life and character of Dr. Beck, which may be regarded as an epitome of the voluminous manuscript prepared by his own pen, it may be thought that here the duty of the writer of this memoir should end. So far as the public is concerned, this may be measurably true; but, in justice to the character of Dr. Beck, and beyond what modesty and propriety would permit him to say of himself; in justice to the feelings of his family and surviving friends; and in justice to the dictates of my own regard for his memory and many virtues, I must be permitted to add my feeble testimony to that of the work of his own mind and hands. A personal, friendly, and, to a great extent, business relation existed between us from the

time of our first acquaintance, in 1822, up to the time of his death in 1858, a period of over thirty years. We were both elected members of the Albany County Medical Society in 1823. In 1824 we were associated in giving instructions to a private class of medical students. For the same consecutive seven years we held professorships in the Vermont Academy of Medicine, and for twelve years our efforts were united as professors in building up a permanent and well-earned reputation for the Albany Medical College.

While Dr. Beck resided in Albany, so intimate and mutual was our confidence in each other, that in his absence the professional care of his family was placed in my hands.

With nearly or quite twenty years of business connections between us, and with intimate social relations, it would seem that ample opportunity was afforded me to learn his true character, and properly to appreciate its many excellent traits. Industry, honesty, and frankness, regularity, neatness, and economy, were conspicuous in all the positions of life it was his lot to occupy. His literary and scientific labors fully attest his character for industry. During the lecture term he was constantly engaged in the laboratory, either in superintending or in making the necessary manual preparations for his lectures. In his studies his mind was deeply absorbed in the pursuit of the object before him. Even his countenance indicated the hard labor of his mind.

His honesty was shown in all his business transactions, whether with the public or with individuals. He never availed himself of any position of place or power to speculate or to enrich himself at the expense of the public or of individuals. In all frankness he did not hesitate to express his disapprobation of any measure or business transaction that he could not conscientiously approve and sustain. And in his case firmness was so closely united to frankness, that, whenever he openly took a position, he was not easily moved from it. Although, at the latter part of his life, he was not in the enjoyment of good health, yet during his lecture term in our College his regularity was proverbial. I uniformly found him in his laboratory early in the morning, and when the lecture

hour arrived he was always ready. It was in and out of the laboratory, in the condition of his room and apparatus, books and papers, that order and neatness prevailed. His chemical and philosophical experiments were uniformly neat and successful. He was an economist in the broadest sense of the term; in the employment of his time, in the management of his domestic affairs, and in his expenditures in the lecture room. He did not use chemical tests grudgingly on the one hand, nor prodigally and wastefully on the other. In the management of his laboratory, it is believed that he studied the best interests of the College and his colleagues.

To give some idea of the estimate placed upon Dr. Beck's instruction, and his devotion to the cause of science even to the last, I shall quote the language of one of his old pupils, a graduate of, and now a professor in the Albany Medical College.* "Deeply absorbed in the subject which he taught, and persuasive in his manners, he riveted your attention to his remarks, in a way you could not resist. He made you feel that it was his desire that you should learn what he taught; and it was this that made his class ever willing and attentive."

Dr. Beck died at Albany, on the 20th of April, 1858, in the 55th year of his age. His remains were deposited in the family tomb at that city, where no marble column or granite pillar has been erected to perpetuate his honored name, his scientific fame, his moral and religious character; yet may we not say, in the language of the poet,

"These, these no marble columns need:
Their monument is in the deed;
A moral pyramid, to stand
As long as wisdom lights the land.
The granite pillar shall decay,
The chisel's beauty pass away;
But this shall last in strength sublime,
Unshaken through the storms of time."

* Annual address delivered before the Albany County Medical Society by J. V. P. Quackenbush, M. D.

WILLIAM E. HORNER.

1793—1853.

It is more interesting to the popular mind to dwell upon the deeds of military heroes, or the history of men distinguished in the political arena, than to follow the quiet career of one who has devoted himself unostentatiously to usefulness, and whose true merit can only be appreciated by the members of a particular profession. We think more of him who consigns multitudes to destruction on the field of carnage, than of the man whose office it is to save human life, and who, by his scientific researches and discoveries, and by his instructions to those flocking round him for knowledge, has been, and will be the means of rescuing from premature death, a number still greater. Contemplating the first, dazzles our imaginations and arouses ambition; the second elevates us morally, and awakens the desire to be useful among our fellow-men; hence, if not the more attractive it is the more philosophical study. We offer a sketch of the life of one who presents this contrast very strongly.

WILLIAM EDMONDS HORNER was a native of Virginia. He was born at Warrenton, Fauquier County, on the 3d of June, 1793.

Some account of his parentage may not be unacceptable, since we look for a worthy son from a worthy sire, and we may well believe that one motive which impelled him in his honorable course, was the desire to maintain in fair fame, the unblemished name which had been transmitted to him by his ancestors. His grandfather, Robert Horner, was an

Englishman by birth, but when very young, sought his fortunes in the then new world, America. Engaging in mercantile pursuits, he settled at Port Tobacco, at that early day, a flourishing business town of Maryland. He married Anne, widow of the Rev. Samuel Claggett, and daughter of Dr. Gustavus Brown. This lady was one of nine sisters, whose history with that of their descendants, would form a curious and interesting chapter of personal memoirs. They were alike noted for the graces of person and mind, for beauty, amiability, and intelligence. They were all married, and each one has left a numerous train of posterity. Of these, all are or were respectable, many distinguished. In the past generation, one was a learned bishop of the Protestant Episcopal Church; many fought for liberty on the fields of the Revolutionary War; while others were eminent in the various pursuits of life. In the present day, one sits upon the Bench of the Supreme Court of the United States, another upon that of Virginia; many hold other high civil positions; and several bore their country's banner, and shed their blood foremost in the fight, upon the battle-fields of Mexico, and in the halls of the Montezumas.

Robert Horner died when young, leaving but two children: Dr. Gustavus Horner, who attained high standing upon the limited professional field to which his exertions were confined, and William, the father of the subject of our memoir. The latter, like his father, became a merchant, and after various wanderings, found a home finally at Warrenton. He married there Mary, daughter of William Edmonds, a gentleman of worth and influence.

William Horner was a man of strong mind and of the most sterling integrity, though of limited education. Both he and his wife were deeply imbued with the true principles of religion. They lived long and happily together, being blessed with many children, who look back to their care in moral and intellectual training, and to their high examples of piety and virtue, as the groundwork of their prosperity. He was not successful in the accumulation of wealth, but he poured out

his earnings with a lavish hand, in procuring for his sons the advantage of the best schools of the day. This was all he had to give them.

In the evening of his days, the wisdom of this course was made manifest; for in a green old age, he looked with pride upon them—all prosperous and respectable, one certainly distinguished—as they gathered round him in their visits to the old home, and brought with them for his blessing, their children and even their children's children. His life, though obscure and laborious, had been well spent and useful. As he had lived a Christian, so in his death there was the spirit of a just man made perfect.

The boy is but a type of the man; so in early youth, the subject of our sketch gave many indications of the qualities which marked his character in after years. His frame was always singularly meagre and delicate. From this, and from a gentle, sensitive disposition, he generally avoided the ruder sports of boyhood, and found companionship in books. His reading even then, was not of the kind usually deemed attractive to youth, but consisted of grave studies. His mild, placid countenance and intelligent conversation, frequently engaged the attention of his seniors, but he won the hearts of all his youthful companions by his amiability and love of truth. Very early in life, he displayed a considerable talent for mechanics. When only nine years old, he was taken by his father on a visit to the Eastern Shore of Maryland, and saw a small vessel anchored in the bay near by. His observation of her was so close, and his memory so accurate, that on returning home, he obtained a log several feet in length, by the most persevering labor scooped it out into proper shape, constructed a deck, hatchway, mast, spars, and rigging in exact imitation, and enjoyed the fruit of his ingenuity and industry, in witnessing, with his companions, the manœuvres of his mimic craft, upon a neighboring mill-pond. Other similar incidents might be mentioned, and perhaps this taste for mechanics may have contributed to direct his choice of a branch in medical science. The human body is the most

perfect and complicated of all machines, embracing in its conformation, many of the most beautiful mechanical principles ; and hence, his attention may have been directed more particularly to the study of its structure.

It has been often said that he was slow in acquiring knowledge: this is a mistake ; his perceptions were always quick, and his memory extremely tenacious. This apparent slowness of his mental operations, arose from the deliberate care with which he digested his acquisitions, his mind accurately separating the good from the bad portion of its food, and using only the former.

After going through the common primary branches of education, at about the age of eleven he was placed under the charge of the Rev. Charles O'Neill. This gentleman was a graduate of Trinity College, Dublin, and of Oxford University, a ripe scholar, and a man of fine literary tastes. Appreciating the powers of the youthful mind with which he had to deal, he bestowed great care upon its development. In 1805, his school was removed from Warrenton to Dumfries, Prince William County ; his pupil followed, and remained with him until the completion of his academic course. He thus acquired a thorough and extensive acquaintance with the classics, knowledge which was not suffered to grow rusty from disuse, but retained and improved upon during his whole subsequent life. Dumfries, at that time, was one of the principal trading marts of Virginia. In and about it was collected much of the wealth, as well as the talent and refinement of the period. During his boyish residence there, Dr. Horner made acquaintances which afterwards ripened into friendships, and proved both useful and agreeable to him in his subsequent career. Among these was the celebrated Judge Bushrod Washington, at whose hospitable mansion, Mount Vernon, he was a frequent and welcome guest, and with whom, from that time, he always maintained a strong friendship. In a future page we shall mention some interesting incidents of this connection. In 1809, Horner commenced the study of medicine, remaining at Dumfries with Dr. John Spence, a physician of high local reputation, to which

his pupil bore testimony in an obituary article, published in 1829, in the *American Journal of Medical Sciences*.

Three years were spent in his office, except that during that time he attended two sessions of the University of Pennsylvania. This period was spent in the closest application, and is unmarked by any striking occurrence. In the year 1812, he took up his abode in Philadelphia to prosecute his studies, thus commencing fairly his connection with a school of medicine, deservedly then the first in the United States, and with which his whole career has been so closely identified.

War having been declared with Great Britain, our young student, though not having yet obtained his degree, procured a commission as surgeon's-mate of the Hospital Department of the United States Army. This commission was given on the 3d of July, 1813, and from it may be dated the period when the responsibilities of manhood and the duties of active life commenced. He was then just entering his twenty-first year. Of extremely spare and delicate person, he looked little like encountering the dangers and privations of a frontier campaign, but his mind was disciplined by study, and stored with knowledge, and under that quiet demeanor lay a strong persevering spirit, a patience and a fortitude that could dare all and endure all. In the September following, he was ordered to the scene of active operations on the Canada line, and on reaching his post, was placed in charge of a hospital at Greenbush, which was occupied by those wounded at the capture of York and Fort George. He remained in attendance upon these patients until November, when, leave of absence being granted, he returned to Philadelphia to finish his medical course. On the 9th of April, 1814, he obtained his degree of Doctor of Medicine, and immediately after availed himself of a brief leisure to visit his friends in Virginia, and for a short time was stationed at Washington. On the 26th of May, he received orders to report himself again on the Niagara frontier. Some notes of his journey thither are preserved in a private journal commenced the previous year, and continued at irregular intervals throughout his life. These notes are interest-

ing to one who has travelled recently over the same ground, as in describing the country through which he passed, the contrast between progression at that day and at the present, is pretty vividly shown, and the wonderful improvement very marked. All that vast region of Western New York was then little better than a wilderness. Small villages were sparsely scattered, scarcely breaking with the hum of human industry, the solitude of those dense primeval forests. Now it teems with population and wealth; those villages have grown into cities, and the scream of the steam-whistle is heard amid the roar of Niagara's wondrous cataract. The journey accomplished, our young surgeon reported himself at headquarters, to Major-General Brown, at what has since become the city of Buffalo. The stirring events of that campaign are matters of imperishable history. It is enough for our sketch to say that Dr. Horner, in zealously performing the duties of his peculiar province, had an appropriate and honorable share in them; he witnessed the glories won by American valor in several of the severest battles, and his labors in behalf of the wounded were skilful and unremitting. He was frequently much exposed in the performance of these duties, but ever bore himself with the bravery of a true gentleman. He remained for the most part in the hospital at Buffalo, but occasionally saw service in the field. During his subsequent life, the recollections of these campaigns were cherished with lively pleasure by Dr. Horner. He witnessed and participated in great events, and he gained the esteem and respect of the great men who directed them. First among these was the chieftain, whose youthful laurels were won at Lundy's Lane and Bridgewater, but whose fame has grown into never-dying renown on the bloody fields of Mexico. Dr. Horner, at that time, formed an acquaintance with General Scott, which he always preserved with pride and pleasure.

He contributed in 1852 and 1853, some articles to the *Medical Examiner*, a periodical published at Philadelphia, containing his surgical experiences of the campaign, but with some account of his personal observations of the events around

him. Commending these to our readers, we shall give a few extracts from them which are amusing and interesting. They are singular examples of the utter recklessness of life engendered by daily familiarity with bloodshed.

"I remember one day in making my hospital rounds, a patient just arrived, presented an amputated forearm, and in doing so, could scarcely restrain a broad laugh; the titter was constantly on his face. 'What's the matter? This does not strike me as a subject for laughter.' 'It is not, Doctor, but excuse me, I lost my arm in so funny a way, that I still laugh whenever I look at it.' 'What way?' 'Our first sergeant wanted shaving, and got me to attend to it, as I am corporal, and we went out together in front of his tent. I had lathered him, took him by the nose, and was just about applying the razor, when a cannon-ball came, and that was the last I saw of his head and of my hand. Excuse me, Doctor, for laughing so. I never saw such a thing before.' This occurred during the siege of Fort Erie. Out of barracks, it is common for soldiers in messes, to cook at fire-places made of two banks of turf, crossing like the ridges of the occipital bone; when not on parade, these places are the resort of groups of soldiers. On an occasion of this kind, one of the soldiers standing on one foot, a cannon-ball struck him on the head, and in doing so gave a whirl to the whole body upon the leg as he stood; the other leg flew out, as the headless trunk turned, and upset a camp-kettle of soup in the process of cooking. The soldier to whom it belonged was quite indignant at the loss—provisions were then very scarce at the fort—and in his wrath, ejaculated: 'Couldn't you have lost your head without kicking over my soup?'"

In describing the situation of the army and hospital, he says: "The encampments of the army at Buffalo were broken up about the 1st of July, 1814. Orders were issued for hospital preparations; a number of tents were left behind for future sick-service, and for the sick of the regiments there on hand. The present Eagle Hotel and Railroad Depot of Buffalo occupy the heart of the city, upon which the hospital was

opened. The entire area allotted to it was to the west of the principal street, upon the first rise of ground there in ascending from the creek. The space was about equal to that of the State House Square in Philadelphia, perhaps longer, being more of an oblong. While in the act of getting the hospital ready for service, it received a visit from General Scott, the universal favorite of the day, for his gallantry in the preceding campaign. As he rode through the hospital-grounds, in his usual dashing style, with his aids, he said, in passing, 'Well, Doctor, but little work here as yet.' 'No, General, we are looking for some.' 'You will get it before long,' was his reply, and off he careered with his staff." We could give other interesting extracts, but our limits forbid.

On the 24th of December, Dr. Horner was relieved from duty by the removal of the hospital establishment to Williamsville, and gladly availed himself of leave of absence, to seek repose for a time under the paternal roof. His continuance in the army after this time was very short. Peace was restored. The prospect for promotion poor; so, after serving for a part of the winter and spring of 1815, at Norfolk, his connection with the service was closed by his resignation, sent in on the 15th and accepted on the 22d.

He then took up his residence at Warrenton, determined, however, to make it but a temporary place of abode. Thrown upon his own resources for support, he entered assiduously upon the practice of his profession, and met with some encouragement; but the place was ill suited to his habits, and afforded too narrow a field for one of his views and aspirations. As he remarked to the writer later in life, "Virginia is a fine nursery for young men, but a poor theatre for the display of their abilities." We have made some mention of the journal which he had formed the habit of keeping; in its pages, the struggles of his mind, having this determination before it, are fully depicted. Philadelphia was the great seat of medical science in the United States; and, with modest reliance upon himself, he looked to it as offering the highest rewards to talent and industry. While residing at Warren-

ton, he occupied a small office in common with his elder brother, who had just commenced the practice of law. Confidential as they were, no intimation was given of the, to him, momentous step he was meditating, until his conclusion was fully arrived at. He labored on in his round of country practice, till suddenly he said to his brother that he intended to remove to Philadelphia. His conduct at this crisis of life affords a strong index of his character. With a countenance always placid, and a manner peculiarly gentle and quiet, his words were few, but very much to the purpose; his resolves slowly and carefully considered, but once arrived at, very rarely changed. A paper, written at the time, shows that this purpose, though suddenly announced and promptly carried into execution, had been deeply pondered upon, and all things accurately weighed. The result has been so exactly in accordance with his reasoning that it seems almost to have been dictated by a spirit of prophecy. In the ensuing fall, taking the decisive step, a note is made in his journal as follows: "The Rubicon is passed. I have forsaken my friends and my practice, and am now on my way to Philadelphia, to seek my fortunes. I have put all at hazard. Oh, thou Father everlasting, be propitious to my cause!"

Thus, the beginning of 1816 found our young adventurer in Philadelphia, unaided by friends, unbacked by influence, unknown, and poor. He had come to move with the dashing tide of a great city, and sink or swim upon its troubled waters. The prospect for success seemed very dim, but the qualities with which he commenced the battle of life, were integrity, pure and incorruptible, untiring perseverance, zeal, and earnestness; with these were united a devoted love of his profession, and an extensive acquaintance with it for one so young and whose opportunities had been so limited. He possessed the best of all talents, the faculty of intense application to the thing in hand, a perfect concentration of his mind upon the subject before it. His health had never been good; but with him, the mind was truly the jewel, the body but the

casket; the one was entirely subservient to the other, and was only valuable from their intimate connection. We find, from his writings even at this early date, that he thought much upon religious subjects; and, recognizing the power and mercy of the Supreme Being, appealed often to his heavenly throne in prayer. It is almost needless to say, after describing such a character, that his enjoyments were all of an intellectual kind, and that he never indulged in the pleasures or excesses common to young men. He had the ardor of youth without its errors.

The winter was passed in close attention to the studies of the University, his chief attention being devoted to anatomy and surgery. He says: "My prospects are unflattering, but patience and perseverance may enable me to surmount the difficulties which oppose my progress; at all events, I shall put my shoulder to the wheel."

The ensuing spring brought with it the first small earnest of success, in his appointment by Dr. Wistar as his dissector, with a salary of \$500. He thus early secured the friendship of this gentleman, who, then in the full zenith of his ripe pre-eminence, occupied the chair of Anatomy in the University. In the fall succeeding, the place of surgeon in an East India-man, bound for Calcutta, was offered to him.

He always felt a great desire for travel in foreign countries, and had once previously made ineffectual application for a similar situation. The temptation to accept at this time was very powerful. India was the El Dorado of that day, the high-road to fortune. There were as yet few inducements to remain in Philadelphia. He had formed no ties of interest, but there was an obligation of duty, a moral bond to fulfil his engagement with Dr. Wistar, and this tie, weak as it is with most men, was sacred with him. We quote again from his journal. "I am indebted for this to the friendly attention of Joshua Longstreth, merchant. My engagement with Dr. Wistar induces me to decline the proposal. It is said that the fortune of every man depends upon some unexpected circumstance; this may have been the circumstance on which

my fortune depended. God grant that I may not have cause to regret my want of foresight on the present occasion. My refusal, however, was the result of my sense of obligation and honorable intentions with regard to Dr. Wistar. It is said that honesty is the best policy ; here then is a trial of the rule."

As the most significant commentary on the above, we find this note appended under date of January 1st, 1832. "See vote of Trustees of University of Pennsylvania, appointing me Professor of Anatomy, *vice* Dr. Physick resigned." Honesty did, indeed, prove to be the best policy.

During the next two or three years, two events occurred which gave him much distress, and seemed each in its turn to have an untoward influence on his fate. In 1818, his friend and benefactor, Dr. Wistar, died. Dr. Dorsey was appointed in his place, to the chair of Anatomy. He, too, appreciated the merit of Dr. Horner, and renewed his appointment of dissector. But he also died. Young, brilliant, and gifted, he fell in the very commencement of a career of bright promise, for, on the very evening of his introductory lecture, one of the most beautiful and able productions that had ever been delivered to a class, he was attacked by disease which proved quickly fatal. Dr. Physick, then Professor of Surgery, undertook, in addition to his own duties, to finish the course of anatomical lectures. Having secured the aid of Dr. Horner as his demonstrator, he was seconded by him with so much zeal and ability, that the course was concluded amidst universal satisfaction and approval. Subsequently, Dr. Physick exchanged the Professorship of Surgery for that of Anatomy. He renewed the appointment of Dr. Horner as Demonstrator, and the connection between them became cemented by the strongest personal and professional ties. On the 17th of November, 1819, Dr. Horner was appointed adjunct Professor of Anatomy. This was a place of considerable emolument and high professional distinction.

Dr. Horner's frame, from his earliest years, had been extremely light and feeble. His habits of abstemiousness and

systematic attention to his health, had alone preserved it from giving way. About this period, owing to intense application and his sedentary life, it began seriously to suffer. The disorder of his physical faculties took the form of a dull headache, which was, with but few intermissions, his companion from this time until his death, and a dyspeptic derangement of the stomach, which affected his mind very powerfully, producing frequently gloomy fits of hypochondriasm. But so complete a mastery over himself had his indomitable energy and force of will acquired, that, even in the worst of these fits, his outward demeanor was unchanged. He went upon the apparently quiet tenor of his way, in the daily round of duty, and none knew the effort that it cost him.

In his journal of this period, which was a faithful record of his most private thoughts, and which remains as an accurate delineation of his character, we see the first evidences of this struggle with himself, so long and so bravely maintained.

Wrapped in his studies, and counting each hour as lost which did not add something to his store of knowledge, he had hitherto partaken very sparingly of the pleasures of society which glittered around him, and looked upon love, that passion which is generally classed among levities, but which is indeed the most powerful of all, as a mere chimera of the imagination. But this philosophy was about this time proved to be ill founded, for he became acquainted with one who deeply engaged his affections. The load of care for future support being removed by his recent appointment, he sought her as a partner, to aid him in the career that the future presented, and to share in the fortunes that it promised. On the 26th of October, 1820, he intermarried with Elizabeth, daughter of John Welsh, one of the first merchants of the city.

This union was based upon the sincerest mutual affection. It contributed much to his prosperity, and was one of unalloyed domestic happiness. It was dissolved by his death, after the lapse of thirty-three years.

His mind still bent upon professional advancement, for which there was now a new motive, and with which he suffered

no wishes merely personal, to interfere, in a short time after his marriage, finding himself in possession of the necessary means, he went to Europe.

The visit was not made to gratify curiosity merely, but to reap the advantages that Paris alone holds out to the medical student. The greater part of the year 1821 was most profitably employed abroad, and he returned, not only improved in the science to which he had devoted himself, but with tastes elevated and polished, by a careful study of the beauties of art, and the refinements of literature in the Old World.

With invigorated frame, with mind clear and active, we find him again at his post, and the succeeding three or four years may be considered the most marked of his life. In 1824, he discovered the "Tensor Tarsi," or, as it was named after him, "Musculus Hornerii," an important muscle of the eye, which had previously escaped the attention of anatomists. A full description of it from his own pen, appeared in a series of articles, published in the "American Journal of Medical Sciences" for that year. His claims to this discovery are universally conceded by men of science, in America and in Europe. During the same period, he was engaged in the preparation of his work on Special Anatomy and Histology. This book was published in 1826, and has been almost universally adopted as the text-book of the medical schools. His attention had also been turned to the improvement of the anatomical collection established at the University by Dr. Wistar. His additions to it, commenced about this time, and continued throughout his life, comprise two-thirds of the whole, and now, under the name of the Horner and Wistar Museum, it is one of the most valuable anatomical collections in the world. Thus at this early period, the solid basis was laid for an enduring superstructure in coming years.

He was at this time physically better able to endure labor than ever afterwards. His division and employment of time were extremely methodical. Only six hours of the twenty-four were given to sleep. He rose always at five, and "commenced the day by an humble appeal and a thanksgiving to

Almighty God." This he deemed the only fit preparation for its duties. It was then passed in the most laborious attention to the work before him, and concluded by "reading a chapter in the Bible, and by supplication to the Almighty." He valued particularly the quiet of early morning, and daily, ere yet the watchman had ceased calling the night's last hours, his lamp might have been seen at the University, as he labored over his anatomical preparations.

In 1826, an incident occurred worthy of mention. Judge Washington, who had been his friend in early youth, being on a visit to Philadelphia, was taken ill there. While sick, he was visited by Dr. Horner, and a conversation of an interesting and instructive character, relating to the Supreme Court, its organization and decisions upon questions of States Rights and constitutional constructions, took place between them. The acquaintance commenced in kindness to the Doctor in boyhood, had ripened into friendship. Two or three days after this interview, the Judge's illness took a sudden turn and proved fatal. His remains were conveyed to Mount Vernon for interment. His wife in following them, had proceeded but a few miles from the city, when she was attacked by apoplexy, and died in her carriage. Her body was taken back to Philadelphia, and prepared for the grave under the Doctor's roof. Commenting on this event, he remarks: "In the accommodation which was afforded her in my house, I was struck with the strangeness of the revolutions which are produced in individual circumstances. Twenty years before, when in the height of prosperity, she had been kind to me as a boy, visiting at her house, and from whom she could reasonably expect no return. Now those blessings which the Almighty has conferred upon me, of a good wife and moderately easy circumstances, have enabled me to show some gratitude, in giving a quiet and respectful asylum to her remains under my own roof, and in contributing to the comfort of the relatives who attended her." She cast her bread upon the waters, and it did return after many days.

Dr. Horner's life was unattended by any very marked event

for several years. He availed himself fully of the advantages of his position as adjunct professor, and continued to rise in public esteem. His fortune was increasing, and a family had begun to grow up around him. He lived at that time in Chestnut Street, above Eighth, in a house, even as we write, about giving way to a splendid edifice. This was then the west end; it is now the very heart and centre of Philadelphia.

In 1831, Dr. Physick, overcome by age and infirmities, resigned the chair of Anatomy. In November of that year, by a unanimous vote of the trustees of the University, Dr. Horner was selected to fill his place: thus in fifteen years from the time of his first settling in Philadelphia, we find him in a position, the first in his particular branch, and fully equal to any in the profession of medicine. With its hopes and fears, the succession to this department had modified his whole life. From the first, it was seen in his lectures that he aimed not to display his own abilities, but to instruct his class. Plain, perspicuous, unadorned, purely anatomical, his explanations extremely pointed and clear, he never acquired, for he never sought, the reputation of a brilliant lecturer, but he made good anatomists. He adhered so closely to his text, that he has been sometimes called the "man of one idea;" but those who did him this injustice little knew the varied stores of knowledge that were gathered in his mind, and used in their appropriate places. Modesty and devotion to professional pursuits, prevented his appearance before the public as a miscellaneous writer, but he has left manuscripts unpublished which show extensive information, the deepest and most accurate reasoning, and fine literary taste.

In 1832, on the approach of the cholera to Philadelphia, a sanatory board was formed, consisting of the principal physicians of the city, to devise means to check its ravages. Dr. Horner was one of this board, and the duty was assigned to him of taking charge of one of the temporary hospitals. He had stood unmoved, calm, and fearless upon the battle-field, ministering to the wounded amidst the roar of cannon and the crash of musketry; but now his devotion to duty was put to

the test in circumstances still more appalling. In the gloom of pestilence which lowered like a cloud over the devoted city, he was at his post, giving all his skill to the aid of the sufferers, and at the same time investigating with the eye of science, the nature of the terrible disease.

His discoveries and observations, since published, have thrown much light upon what had previously been a fearful and unexplained phenomenon to the medical world. His claims to have made these valuable discoveries, are admitted in Europe as well as in America. His personal exertions during this season of awful public calamity, were acknowledged by his fellow-citizens in the presentation to him of a magnificent silver pitcher, on which are inscribed these words :

TO DR. WILLIAM E. HORNER.
The City of Philadelphia,
Grateful for his disinterested and intrepid exertions
in a period of public calamity.
Transeat in exemptum. August, 1832.

Such a testimonial may be justly deemed a more valuable tribute to high merit, than the sword voted by admiring legislators to the warrior for deeds done in bloody battle.

A change was about this time going on in the views of Dr. Horner upon religious subjects, which at a later date was the subject of much animadversion, and which should be adverted to, although it may not be deemed of public interest now. He had imbibed from his parents a strong reverence for religion, and his mind had always maintained its early impressions. He was also too full of philosophic thought not to believe that the soul survives the perishing frame, whilst recognizing in the wonderful order of nature, a Great First Cause who created, and a Supreme Ruler who governs all.

The Bible had always been a study with him, and during his fits of depression from ill health, he often found comfort in its pages, rising from its perusal nerved for the struggle against his gloomy disease.

His education had been thoroughly Episcopalian, and all

his prejudices were in favor of that Church, though he had never attached himself to it. In the hours that he could spare from his profession, theology was a favorite study, and his knowledge of it was extensive and exact. He felt the true force of the fact so often flippantly repeated, that he, like all other human beings, was approaching death, and he earnestly had attempted a preparation for it. In the summer of 1830, his mind being very full of this subject, as it usually was during leisure days, being on a visit to Cape May, he made the acquaintance of a distinguished divine of the Catholic Church, and was induced to extend his inquiries into its doctrines. His astonishment was great to find them so different from the representations usually made. In the cholera hospital, in 1832, his attention was further fixed by observing the conduct of the priests and sisters of charity, in attending the sick. When other ministers fled in dismay from the dread pestilence, there was the Catholic bending down his ear to catch the last whispered word of penitence from the dying, and when nurses were not to be procured, these noble women stepped forward to offer their services without fee or reward: they tended the sick, and soothed the dying agony; they looked to heaven for their reward. Here, then, were people really practising what they preached, really willing, nay, anxious to brave death in doing duty. His desire was excited to know more of the faith which produced such works. He studied their tenets. His inquiries were not those of the excited enthusiast, ready to believe all things, but the calm investigations of the wise and learned man, who sought for a rock on which to plant himself to withstand the storms of life, and to rest his hope of salvation in the world to come. The record of his private thoughts shows how earnestly prolonged were his researches, and how abiding the convictions which were the results. Under date 1833, he says: "After three years of frequent meditation and study of the principles of Catholicity, having since August, 1830, read many of their works, scarcely passed a day without some reflection upon them, and observed frequently the moral influence of this religion upon its votaries,

I now find myself deliberately, and, I think, without the impulses of mere enthusiasm, at the development of a captivating theory of religious worship, disposed to trust my temporal and eternal fate with theirs. I have risen early in the morning, ere yet the watchman had cried the last hours of his vigil, and in undisturbed solitude giving my whole heart and understanding to my Maker, prayed fervently that I might be enlightened on this momentous subject, that I might be freed from the errors of an excited imagination, from the allurements of personal friendship, from the prejudices of education; and that I might, under the influences of Divine Grace, be permitted to settle this question upon its true merits. It has been the last subject of reflection before falling to sleep, and the object of my thoughts in the interruption to my natural repose." For more than nine years he revolved and pondered over this subject, having it thus constantly before his mind. It was not until 1839, that he avowed publicly his adoption of the tenets of "Holy Mother Church," and bowed as a communicant before her altar.

For many subsequent years he pursued his quiet course of usefulness, and fortune seemed to bestow upon him some of her choicest gifts. He accumulated wealth, though ever dispensing it with a liberal hand upon praiseworthy objects, and his domestic circle was made happy by a large family bound together by the closest ties of affection. His health occasionally suffered severely from attacks of the old disease, which clung to him, never relaxing its hold, and occasionally making its attacks with so much violence as to threaten the ruin of his intellect; but he had found a new resource, a new comforter in these as well as in other distresses: he found relief in religious devotion, and rose from prayer with a mind fortified to bear whatever heaven might send. There was so little parade of religion about him, so little outward seeming, that few would have supposed him so deeply imbued with the true spirit of piety. His code of morality was rigid and rigidly observed; he might almost have been called a man without vices, but he never obtruded his religious opinions upon others;

there was no severity or morose asceticism in them, but the firmness of his convictions, and his beautiful creed, seemed to exercise a brightening and cheering influence upon his mind. Elevated to the highest professional position in the United States, it remained now for him to prove his eminent qualifications for it, and to exert his powers of usefulness. For a long series of years the current of life flowed quietly on without any striking points in his career. He won the highest respect and confidence of the medical world, and his name became extensively known in Europe as the great anatomist of America. His students, with scarcely an exception, regarded him with the greatest veneration. Scattered as they now are over the whole United States, indeed, we may well say, the whole world, we believe there is not one who will not bear testimony to the learning and worth of their instructor. In 1833, he removed to a new house in Portico Row, at the corner of Ninth and Spruce Streets, but finding it ill suited to his business engagements, returned, after the lapse of several years, to the old place in Chestnut Street.

Thus were passed more than ten years, the most useful of his useful life. With a certain routine of duty before him each day, in his practice and in his engagements at the University, laboriously employed in spreading and advancing medical science, time glided away without any very prominent events. Fortune smiled on him, and he grew rich in this world's goods, though never seeking money with avidity, and lavishing it with judgment upon many meritorious charities. His family increased and grew up around him, and his career seemed to be unchecked in happiness and prosperity. But his health, always feeble, was slowly giving way; in 1841 he was attacked with dyspnoea, and recovered with difficulty. This disease seemed from that time to seize him periodically, and at each time contributed to wear out the overworked machine. His old enemy, hypochondria, consequent upon fits of indigestion, did not remit its visits; but he labored on. In addition to his daily duties, he was assiduously devoted during all this time to his additions to the Anatomical Museum, and to issuing

such new editions of his work on Anatomy as the public demand and the advancement of knowledge in this branch of science required. In the spring of 1847, with much reluctance, he determined to leave the old house, now grown obsolete and rusty, in which his fame and fortune had been won. He purchased and removed to a spacious and elegant mansion in Chestnut Street, opposite the United States Mint. This was better suited to his family and to his professional convenience. His eldest daughter, Mary, had previously married Dr. Henry H. Smith, then a young but talented physician, since elected Professor of Surgery in the University of Pennsylvania. Four others remained, two of them just budding into womanhood, the others younger. He had, also, two sons. In a short time after his removal, Emily, the second daughter, was married to his nephew, William Horner, Esq., of Virginia.

About this time one of his most useful works, long before conceived, was carried into execution,—the foundation of St. Joseph's Hospital. It is a Catholic institution, based upon the noblest principles of enlightened charity, and if it stood as his only work, would perpetuate the name of its originator. In 1848 he revisited Europe. He was received with distinguished consideration by the scientific men of France and Germany. He was in Paris during the popular outbreak, and witnessed many of the scenes of a French Revolution. On his return in October, in an introductory lecture to the medical class, he gave an interesting and animated account of these events. It is well worthy the attention of the general reader.

The Christmas of that year seemed the climax of his honorable and useful life. The two daughters who had left him returned, bringing their offspring to the family celebration. All his descendants were present at his bountifully spread board: the circle was complete. As the father assumed his place to call down the blessings of Heaven upon his children, each eye was turned upon him with the deepest filial affection, as the fountain from whom their happiness and prosperity flowed, and his brow relaxed from its grave habitual cast.

Death had passed them by: none were missing; there were none whose absence was to be mourned; there was nothing in the past to awaken painful recollections, and the future looked bright before them. There was an interchange of affection and of confidence—a beautiful union of feeling—evident to all, which marked the day as one of unalloyed happiness. They never met again.

Though failing in health, Dr. Horner continued his lectures throughout the years 1849, 1850 and 1851, with unabated success. In 1850 his third daughter, Josephine, was united to Dr. Richard Eppes, of City Point, Virginia. Of most gifted and cultivated mind, of beautiful manners and great amiability, her loveliness of person surpassing, she seemed a being formed to shed the light of pleasure wherever she went. She was her father's favored child; his admiration and love for her were almost idolatry. Life seemed to present rare happiness for her, and flowers only seemed to bestrew her path: but she was doomed to die. The winter of 1852, which promised to add the crowning blessing to her lot in making her a happy young mother, saw her and her infant, clods of the valley. Her death was sudden and painful, and produced an effect upon her father from which he never recovered. Cold, calm, and sedate to all outward seeming, he pursued his usual path, and gave no sign of the grief that was tearing his heart. His journal, still kept at intervals, shows the agony that he felt in his lamentations over his lost daughter. He commenced the course of lectures in October, 1852, with extreme difficulty: the intellect was there, but the body, nearly worn out, was unable to sustain it; but, in spite of medical advice, the habit of labor admitted of no pause; the indomitable energy of the man was there still. With limbs enveloped in bandages, and gasping for breath, he still delivered his lectures, lucid and learned as in his best days. He continued this up to the 22d of January, 1853, on which day he last appeared before the class. The 23d was the anniversary of the death of his beloved daughter. On that day he entered the room in which she died, for the first time since the event, and spent it there

in prayer and meditation. The shock was renewed, and proved too much for him. The complication of disorders which had so long preyed upon his delicate frame now bore him down. He was compelled to lie down at last, with a certainty that he should rise no more.

Life slowly ebbed away: nearly two months passed ere the scene closed. During this time, though suffering the greatest agonies at intervals, he showed his old calm fortitude. He knew that life's last hours were upon him, and talked of death with the most perfect composure. He had looked to it, and prepared for it for many years, and did not fear it, but looked for it with hope and joy, as a release from bodily pain. His religion was not a mere name, it was a part of his nature. Firm now in his convictions of his faith, he was as calm and sedate as he ever had been.

His mind still, from long habit, turned to the studies of his life, and he traced, as an anatomist, the progress of disease, as it destroyed successively the various portions of his frame. A curious anecdote is related of this by Dr. Jackson, who attended him. He says: "He was lying on a couch, Dr. Henry H. Smith and myself sitting on either side. Dr. Horner was suffering some pain, a new symptom, that had just commenced. He demonstrated with his finger the different regions of the trunk, enumerating the organs they contained, and the state of each, and indicating the exact seat where he then suffered the most. This was done with the intense and earnest manner of a demonstration to his class. I was so struck with it as to call the attention of Dr. Smith to this display of the ruling passion strong in death. 'Look! here is the anatomist dissecting his own body, making a post-mortem before he is dead.' The remark so amused Dr. Horner that he laughed heartily, in which we joined him. At the end he said: 'Well, I have not had so good a laugh for a long time.' This occurred on the third day before his death."

Thus it was with him. Instead of looking upon death with terror, he stood upon its brink with the calmness of the true

philosopher, and the faith of a Christian, and examined its phenomena, then going on in his own person, with the eye of scientific investigation. Only two days before his death, he assisted in the examination of students applying for graduation. He was a man of duty to the last.

For some time slowly sinking, on the 12th of March a new disease developed itself, and acted with more rapid fatality. At last, on the morning of the 18th, almost suddenly, the whole frame seemed to give way at once, and he died. A post-mortem examination revealed the correctness of his opinion of his own disease, his heart and bloodvessels being much diseased; though the immediate cause was a perforation of the bowels.

His remains were first interred, in accordance with the usages of the Catholic church, in consecrated ground at St. John's Church; but were subsequently removed to his family vault at Laurel Hill Cemetery.

The news of Dr. Horner's death was received by the whole city with the profoundest sensation; being known to all classes, and the object of universal esteem. Even among the poor, he was looked up to as a benefactor, for even in the midst of his multifarious engagements, he was always ready to give them his professional skill. But it was only in the medical world, the sphere to which he had devoted his time, that the magnitude of the loss can be duly estimated. We are safe in saying, that he has made his mark, as a man of science, upon the age in which he lived; and that his name will live when those of others, who sought renown in more brilliant but less useful occupations, will have perished forever from memory. His publications are all purely medical. His book on Anatomy is the principal one; it is a close, able, technical compendium of his lectures. Besides this, there are a large number of contributions, of much ability and great interest to the professional man, made at different times to medical periodicals. His principal and most valuable relic consists in his contributions to the Museum, of which we have made some

mention. These were bequeathed by his will to the University. Their pecuniary value can scarcely be estimated, as their production required so rare a combination of industry, mechanical skill, and anatomical knowledge, but it was assessed at the sum of \$10,000. He bequeathed also to the University his instruments for dissection. To St. Joseph's Hospital, towards the erection and foundation of which he had looked with so much care, he bequeathed his large and valuable library and his surgical instruments. All Dr. Horner's exhibitions in public, either written or spoken, were so entirely of a professional character, that it has been generally supposed that his knowledge was limited to professional subjects. Such was not the case; his reading was extensive, and his information extremely exact. He wrote much on theological subjects, and occasionally dropped graver pursuits to travel among the flowery paths of belles-lettres. Modesty and the belief that he ought to appear to the public only as an anatomist, prevented him from giving these productions to the world; but they remain as manuscript, and furnish evidence that in any other path of civil life he would have been equally distinguished. He wrote with singular point and cogency, and frequently gave evidences of great power with the pen; some passages abound in all the beauties of elegant composition. We hope that portions of these manuscripts will be published.

Many testimonials of respect were produced at his death. The Trustees of the University of Pennsylvania, its Medical Faculty, the Faculties of the other medical Colleges, the Trustees of St. Joseph's Hospital, and many other public bodies, expressed, in appropriate resolutions, their feelings of sorrow and of the loss which they had sustained. These resolutions, couched in the strongest language, attest his merit, as a citizen and as a man of science.

We have thus presented, with an unpractised pen, the leading incidents of the life of Dr. Horner. After his establishment in Philadelphia, there are but few of decisive importance; for the path by which he climbed was one of many small but toilsome steps, and the summit was only reached by industry.

This is the moral of his life. Let the young imitate him in this, and in the pure incorruptible integrity that shone forth in every act, and success is certain. However arduous the ascent, these qualities are the staff to the aspirant. We might commend him, too, to attention as a citizen, as a husband, and as a father; for, under that calm, sedate demeanor, there burned the liveliest affections; and in the domestic relations, he approached as near perfection as it is permitted to man to come. But the crowning beauty of the man was that he was a Christian, one who not merely bent the pliant knee to the altar, but whose heart bowed in genuine religious fervor to his God.

WILLIAM HORNER.

JOHN APPLETON SWETT.

1808—1854.

JOHN APPLETON SWETT was born in Boston, Massachusetts, in December, 1808. His father, a reputable merchant in that city, and eminently an active, energetic business-man, died in 1834. His mother was distinguished for her intelligence, and still more for her moral worth,—a woman of unaffected piety. To the influence of her life, and reverence for her memory, may fairly be attributed, in a great measure, under Providence, the formation of her son's character, in its moral and religious aspects.*

He was prepared for college at the Boston Grammar School, and graduated at Harvard University in 1828. He was not distinguished for great proficiency in collegiate studies, but held a fair rank in all, save mathematics, to which he had an invincible repugnance. His medical studies were pursued under the direction of Dr. Jacob Bigelow, of Boston, for many years, and up to a recent period, Professor of *Materia Medica* in the Medical Department of Harvard University. He obtained his degree of Doctor in Medicine in 1831, and soon afterward established himself as a practitioner in the city of New York. During the first few years of his professional life, his zeal in the pursuit of medical knowledge was manifested by the discharge of the duties of physician to the City Dispen-

* It is proper to state here that, for the facts contained in this biography, the writer is mainly indebted to a memoir read before the New York Medical and Surgical Society, by B. W. McCready, M.D., and published by order of that body.

sary, with which he soon became connected, and by his co-operation with his colleagues in forming a society for mutual improvement, by means of reports of interesting cases, and the discussion of medical subjects.

Like most young physicians who are enthusiastic in their love of the profession, Dr. Swett was desirous of availing himself of the advantages which are offered by the hospitals, the museums, and the teachers of the Old World. More favored in this regard than many who enter the profession, his pecuniary circumstances enabled him to gratify this desire. On the death of his father, in 1834, he inherited a moderate property. The year following, he sailed for Europe, and was absent about seventeen months, spending the greater part of the time in Paris. Among the many distinguished medical teachers of the French metropolis, Louis inspired him with the greatest regard. He followed diligently the service of this eminent observer and philosopher, at the Hôpital La Pitié. Probably here he acquired a fondness for the particular branch of practical medicine, viz., the diagnosis of diseases of the chest, with which his name has become especially identified.

His biographer, Dr. McCready, adduces evidence not only of his diligence when in Paris, but of the salutary effect of his example upon others, by a quotation from a touching letter addressed to Dr. Swett by the late Dr. Power, of Baltimore, on his death-bed. In this letter, Dr. Power expresses his feelings of gratitude for the influence which he derived from their companionship, attributing to it all his subsequent success and usefulness as a medical practitioner. More precious such a testimonial than the most costly gifts!

After his return to New York, in the spring of 1838, Dr. Swett first became known as a medical teacher. His lectures on the diseases of the chest were first delivered at the Broome Street School of Medicine, a voluntary association for medical instruction. They were repeated at the spring course of the College of Physicians and Surgeons, and published from stenographic notes in "The New York Lancet." These lectures

established his reputation as an accomplished diagnostician, in a class of affections which require for their discrimination certain special modes of investigation included under the name of physical exploration. From that time, he was consulted by patients, far and wide, who were affected with thoracic disease, and the larger share of his private practice afterwards consisted of cases of this class. The lectures thus referred to, formed the basis of an extensive work on Diseases of the Chest, which was published in 1852. This work has been received with favor by the medical profession, both at home and abroad, and will remain an enduring monument of the author's talents, industry, and acquirements.

Prior to his assuming the labors of a lecturer, he was for two years, in connection with Dr. John Watson, editor of a new quarterly, entitled "The New York Medical and Surgical Journal." At the end of this time, the Journal was discontinued, in consequence of the pecuniary embarrassments of the publisher. During its continuance, many of its most able contributions were from the pen of Dr. Swett.

From 1842 up to the time of his death, he was one of the physicians of the New York Hospital. He persevered in his labors in this institution during the progress of his fatal illness, and relinquished them only when his physical powers were so much reduced as to be wholly unequal to the task. He added to clinical investigations, conducive alike to the welfare of patients and the advancement of science, instruction at the bedside, for the benefit of the students of medicine who were attracted to his wards; and he also delivered repeatedly courses of lectures at the hospital on Diseases of the Chest and of the Kidney. To the latter, for several years preceding his death, he had given close study, and more particularly to the malady known as Bright's Disease, to which he himself fell a victim, adding thus another instance to the number in which physicians have died of the affections to which they had given special attention. These instances are so numerous as to imply something more than mere coincidence; and, in fact, perhaps to warrant the conclusion, that to concentrate the

attention on a particular disease, and make it a special subject for study, is to run a greater liability to it than would otherwise exist.

In 1853, Dr. Swett was elected Professor of the Theory and Practice of Physic in the Medical Department of the University of the City of New York. To fill a position of this kind had been his aim from an early period in his professional life. He was now forty-four years of age, in the prime of manhood; his intellectual faculties in full vigor; his mind stored with learning and the lessons of experience. A new career of distinction and usefulness was now opened to him, on which he entered with alacrity, notwithstanding he had for several years suffered from the gradual advancement of a serious and exhausting disease. He completed his first course of lectures in the University during the winter of 1853-4, having discharged the duties of the chair greatly to the satisfaction of those who listened to his instructions. It was evident, however, to his friends that his first course would be his last. The probability of this must have been apparent to himself, for he was fully aware of the nature of his malady, and no one knew better than he that it almost invariably advances steadily onward to a fatal termination. For several years, he had watched the gradual progress of his disease, finding temporary benefit and even apparent restoration by giving short periods to relaxation and travelling. In 1852, he made a brief visit to Europe, with reference mainly to the improvement of health; but during his sojourn in Paris, under these circumstances, unable to repress the gratification of his thirst for scientific knowledge, he attended diligently the lectures and demonstrations of the eminent microscopist and philosopher, M. Robin. His anxiety to prosecute microscopical researches in pathology continued even after his confinement to the bed with his fatal disease. A short time before his death, he exhibited delight at the reception of an elegant microscope, which he had ordered from London. Toward the latter part of May, 1854, his debility was so great as to compel him to relinquish farther efforts to

continue his hospital and private practice, which he never again attempted to resume. He endeavored once more to recruit, by resorting to change of scene and the invigorating air of the country, but without avail. Gradual but progressive failure of the powers of life continued, and he was released from the duties and sufferings of this world in the following September.

A prominent feature in the life of Dr. Sweet is the persistency with which he was devoted to scientific pursuits, and the practical duties of his profession, under obstacles incident to ill health, which would have discouraged most persons; and when, too, for several years, he must have felt morally certain that he was laboring under a fatal organic disease. This will doubtless appear surprising to many readers, and the more so because his circumstances, as regards property, were such as not to render his personal exertions necessary for the maintenance of his family. Great as was his love of the science and the art of medicine, it would be unjust to his character to suppose that this alone was the motive impelling him to persist in his labors until compelled by physical weakness to forego them. An excessive enthusiasm, bordering on idolatry, which is oftener, perhaps, affected than real, was not with him a ruling passion which it may be imagined continued strong in death. A fair estimation of his character leads to other and higher springs of action. In a firm conviction of duty, based on an abiding sense of the responsibility of life, lies the secret of that tenacity of purpose which refused to stop in the path of exertion which Providence had ordained for him, until his course was arrested by the fiat of the Supreme Ruler of human events. Thus actuated and guided, his mind was enabled to struggle manfully and triumphantly with the discouragements of disease, while it was becoming to continue the conflict. And receiving support from a higher source than the fascination of science, he was the better prepared to derive aid and happiness from the latter. Reason, experience, and revelation teach us that it is best to work, so long as we possess the capacity of performing the labors incident to the

position allotted to us. Better, far better to die in the harness, than to await, timorous and inactive, the uncertain coming of the messenger of death. Such were the sentiments entertained by the subject of this memoir. At all events, his life affords evidence of their practical exemplification.

Philanthropy and love of his profession were manifested by Dr. Swett in the disposition of his property. Leaving his family a moderate competence, he bequeathed a handsome legacy to the Society for the Benefit of the Widows and Orphans of Medical Men, which, within a few years past, has been organized and supported by the medical profession of the city of New York.

With regard to his religious faith, and the circumstances attending his last hours, the writer will borrow the account given by his biographer and friend, Dr. McCready.

"Heretofore nothing has been said regarding Dr. Swett's religious belief; but we have reached a period of his history in which that belief was his chief consolation and support. His parents were Unitarians, and had educated him in their own faith. He was well versed in Scripture, and was skilful in the arguments by which his sect supported their tenets. As he grew older, it is probable that his Unitarianism was gradually merged into a philosophical theism; yet to this remnant of faith he clung with tenacity. 'Have I done anything,' he writes in his journal, 'to advance my moral character since I have been in Paris? Nothing. Have I retrograded? I fear I have; but with all my professional advantages, and who can boast of more, shall I neglect what I ought to value more than all—myself? O God! may I, by a frequent contemplation of thy perfections and of my own duty, learn to improve my heart in piety and virtue!' Dr. Swett's mother died in June, 1842. In the last few years of her life, she had found reason to change her religious views, and became a sincere and devoted member of the Presbyterian Church. Naturally anxious on account of the religious welfare of her son, and concerned at the effect of her former teachings, she repeatedly wrote to him upon the subject. Dr.

Swett was tenderly attached to his mother. After her death, her testament lay for years upon his table; it occupied a particular spot, and he was uneasy and disturbed if by any accident it was displaced. He had placed great reliance upon her judgment, and the letters which she had written him, as well as her last wishes, made a deep impression upon him. After his first serious attack in 1848, his own health had never been robust; he looked upon himself, if not already suffering under Bright's disease, as having a strong tendency to it. He observed to one of his friends, during his illness, that he had never examined a patient at the hospital, suffering under albuminuria, without the thought recurring that he himself was to be carried off by that disease. Under such influences the grounds of his religious opinions became the subject of serious and earnest thought; and the result of his inquiry was, for the last year of his life, a full belief in the doctrine of the atonement, and in the divinity of the Saviour. The time was now come which tested the sincerity of his belief, and showed the reliance which he placed upon it.

"After the Doctor's return from Gloucester, he was decidedly weaker, and it was evident that the fatal event could not long be postponed. He was fully aware of his situation. In spite of the ultimately fatal nature of his complaint, his recovery on previous occasions had heretofore buoyed him up with the hope that he might once more meet his class in the lecture-room; but he was now conscious, both from his own sensations, and from the candid admission of his physicians, that he could not many days survive. The conviction brought with it no fears—perhaps, no regret. He was prepared alike to live or die. He emphatically declared that he had no fear of death; that he had an entire reliance upon the atonement of the Saviour. He regretted that 'he had not previously united himself to some evangelical church. A dislike of attracting notice to himself, and a wish to wait until more robust health would leave no possible imputation upon his motives, had alone prevented him. On the whole, he preferred the Episcopal Church, but he was not convinced of the truth of

all her dogmas. The apostolical succession could not be proved. He was not sectarian in his views; his charity was large enough to embrace all true believers in Christ.' On Tuesday, the 12th of September, he received the communion from the hands of the Rev. Dr. J. A. Spencer. The night but one preceding his death, when immediate dissolution seemed impending, he desired his wife to read to him the 15th chapter of the 1st Epistle of Paul to the Corinthians. At its conclusion, he remarked: 'What a glorious chapter! The sting of death is sin. To one who has a full faith in the atonement, death has no sting. None,' he emphatically repeated. On Sunday noon, he took a final leave of his family. Beckoning one, who shared with his wife the task of watching beside his dying bed, to take his hand, he said: 'My old and tried friend, we must soon part, but I hope for a short time. I hope we shall meet in heaven. I could have wished,' and he gently pressed the hand which he held, 'to have lived to see you a member of some Christian church.' He made some remarks to his family, and shortly afterward requested some morphine should be given him. His friend objected, 'Was not his mind clear, and was he not free from pain?' He assented. 'He had no pain; but there was a sensation of sinking and oppression which he supposed was the immediate precursor of death, and from which he sought relief. He had said all he wished to say; he had taken leave of his family; he had no further commissions to have executed.' It was agreed to give him such a dose as might afford him some relief, and yet not be sufficient to cloud his intellect. He took accordingly five drops of Magendie's solution of the sulphate of morphine. It had a good effect, and he thenceforth expressed himself as perfectly easy. During the afternoon and evening, he slumbered for the greater part of the time. During the night he exclaimed, 'Yea, though I walk through the valley of the shadow of death, I will fear no evil, for thou art with me; thy rod and thy staff they comfort me.'* He remained

* 23d Psalm, v. 4.

for a time quiet, and without speaking ; suddenly, there was a slight twitching about the muscles of the mouth, and all was over."

In summing up the moral and intellectual traits, which distinguished the character of the eminent physician, whose brief but honorable and useful professional career claims the respectful remembrance of the public, and whose example may be held up as worthy of the imitation of young men, who are about to enter on the responsibilities belonging to the medical profession, the writer will continue to quote from the biographer just referred to, whose intimate acquaintance with Dr. Swett enabled him to speak from a better personal knowledge.

"Dr. Swett's understanding was clear and comprehensive, his judgment sound. He was a careful and patient observer, and a devoted and conscientious lover of truth. He was energetic and persevering in what he undertook, his passions were moderate and under the control of his reason, and he possessed, in a high degree, that almost instinctive recognition of truth and propriety, quite independent of the mere power of reasoning, to which we give the name of common sense. The soundness of his judgment and the moderation of his views, were shown in the conduct of his ordinary affairs, as well as in his professional career.

"His love of truth, the care with which he guarded himself against all undue leaning or bias, was a marked feature in his character. It was not merely with him the instinct of the gentleman, the avoidance of the acted or spoken lie, but a principle which pervaded his whole life and influenced his conduct. In relating a case or giving an opinion, he would not only state what was true, or what he believed to be true, but he would disdain to round off with a phrase, those points on which he was ignorant, or on which his observation had been imperfect. 'Guard yourself against envy,' he said to a friend, 'it will not only impair your happiness, but it will distort your views; you will be unable to see things as they are, and it will spoil your whole moral character.' He was fond of music, but had no skill in it. He had, too, a love of

painting and sculpture, and his criticisms on the works of art he saw abroad, as contained in his journal, seem just and appreciative. With all this he had little imagination, and no love of poetry. Byron was the only poet whom he read with pleasure. . . .

“Another of his traits that must not be passed over in silence, was his kindness of heart. His was not alone the ready charity, which seeks the easiest mode to relieve itself from an unpleasant emotion, but a thoughtful and considerate kindness, which carried out deliberately, plans deliberately formed. Were not the circumstances too recent, and the names too readily traced, anecdotes could easily be given, which showed a delicacy of feeling of which few are capable. Perhaps of all his qualities, this the most endeared him to his friends, and made him loved best by those who best knew him.”

AUSTIN FLINT.

ELISHA BARTLETT.

1804—1855.

DR. ELISHA BARTLETT was born at Smithfield, Rhode Island, on the 6th October, 1804; he died in the city of Providence, in the same State, on the 19th July, 1855. Within this brief term of less than fifty-one years, he occupied many positions of dignity and importance, distinguished himself as a teacher of medicine in several of its departments, lectured with great acceptance in schools of medicine in almost every section of our country, and published numerous valuable writings, among which, two volumes at least of his works, will long preserve his name and memory, among his professional brethren of America and Europe.

Although he was not at any time, in his youth, a member of any collegiate institution of academic learning, Dr. Bartlett's education was a sufficiently thorough one, according to our not very lofty cis-atlantic standard. It was the result of attendance at the best seminaries, in several places in which he occasionally resided; and in a similar, unfixed way, he pursued his earlier professional studies, with physicians of distinction, established at Uxbridge, Worcester, and Providence. Thus also he heard courses of medical lectures both in Boston and Providence, and took his degree of Doctor from Brown University, in 1826.

It is not to be wondered at, that in after life, we find him, to use a German phrase, a many-sided man: familiar, apt and attractive in all social circles; cosmopolitan in his wide and quick affinities; easy and graceful in his manners, and uni-

versally popular, winning "golden opinions from all sorts of men."

No man loves his home more than the New Englander; no one leaves it more readily, or changes it more unhesitatingly, whenever such change is attended with advantage, or offers suitable inducement or promise of benefit. He holds with Shakspeare, that "home-keeping youth have ever homely wits;" and, indeed, there is no better mode of attaining a free deportment and a thorough knowledge of the world, than by large travel or varied residence. Such we shall find to be, in a remarkable degree, the habit of Dr. Bartlett; commenced in childhood, and extending to the very close of his life.

Soon after his graduation he crossed the Atlantic, far better prepared to improve the opportunities enjoyed in foreign seats of learning, than most of those who flock annually to Europe from our shores. He passed a year of assiduous labor, and, as events showed abundantly, fruitful study at Paris, taking notes of lectures, attending the practice of the hospitals, and, in every way, profiting by the ample field of observation and instruction opened before him in that great metropolis. A tour in Italy, full of enjoyment and interest, preceded his return to America, which took place in 1827. At the end of that year, he went to reside at Lowell, Massachusetts, and commenced his professional career in that busy and prosperous city. He soon married and obtained a highly respectable practice, which adhered to him as long and closely as he desired, while rising into a popularity that expanded far beyond his mere professional relations to the community.

He must have shown early capacity as a medical teacher, although it is now difficult to point out the mode of its manifestation, for, in 1828, he was offered the Professorship of Anatomy, at Woodstock, Vermont, in the school then recently established there, and which, though he declined it at first, he afterwards accepted, lecturing there for eight or nine years, while he held a chair also in Kentucky. In 1832, he was appointed Professor of Pathological Anatomy, in the Berkshire Institute, at Pittsfield, Massachusetts, where he lectured

several years. It appears that he occupied for a year, one of the chairs in the medical department of Dartmouth College. In 1844, he was elected Professor of the Theory and Practice of Medicine, in the University of Maryland, at Baltimore. We find him for six consecutive years, filling the same place in the Transylvania Medical School, at Lexington, Kentucky, of which the distinguished surgeon, Dudley, was the founder and acknowledged head. Thence he removed, by invitation, to Louisville, in the same State, where he held the Professorship of Theory and Practice, in the University, at the period of its highest prosperity, to which doubtless he contributed, by his reputation and exertions, his full share. In 1850, he was prevailed upon to accept the chair of Institutes and Practice, in the University of the City of New York, which had become vacant by the removal to the South, of Professor S. H. Dickson; being accompanied in the change by his friend, Professor S. D. Gross, who took the Chair of Surgery, then vacated also by the resignation of Professor V. Mott. In the year 1852 occurred the death of the lamented Professor J. B. Beck, for so long a time the useful and esteemed incumbent of the chair of *Materia Medica* and Medical Jurisprudence, in the College of Physicians and Surgeons, of New York. Being called to fill this place, Dr. Bartlett readily consented, as he thus became associated with many old friends whom he highly valued, and attained a position which had always seemed, as we learn, especially desirable to him.

But now at last, his admirable powers of action and endurance began to yield, under the sufferings of a neuralgic affection of long standing, the gradual but irresistible progress of which forced him, within a brief period, to retire from the lecture-room, as he had previously given up all other labor. He therefore left New York, and went to reside in the town of Smithfield, Rhode Island, where he was surrounded by a host of connections and admirers; and where, in the summer of 1855, after nearly three years' patient and resigned confinement to his invalid chamber, he breathed his last. "Such," to employ a fine phrase, which he uses in his notice of Dr.

Wells—"such is a rapid enumeration of the leading events in the life of" Dr. Bartlett: "there is very little about them either brilliant or imposing; and in order to understand all the importance and the value of his life, we must turn to the study of his works." The notices of his death, written and published at the time, from various sources and in sundry forms, all betoken the marked esteem and regard, and the fond affection, which he never failed to inspire in the several circles of which, whether for a shorter or longer period, he became a member; all go to prove the devotion to duty, the wide and versatile talent for business, the kindness of heart, the universal philanthropy, which constituted his character; and all bear witness to his gentleness and refinement of manner, grace of deportment, and rarely equalled social and personal attractiveness.

As will be readily inferred, from the numerous and very varied stations and positions which he was called upon to hold during his not long but active and energetic life, he has left behind him a large catalogue of writings, upon a considerable diversity of subjects, each one of which was effective and appropriate to the time and occasion. Among these miscellaneous productions ought to be mentioned "A Vindication of the Character and Condition of the Females employed in the Lowell Mills." Dr. Bartlett, whose unexampled popularity has been spoken of, had been chosen first Mayor of the city of Lowell, chartered in 1836. Lowell had sent him, in 1840, as her representative, to the Legislature of the State of Massachusetts, of which body he was, for two or three sessions, a very useful member, exerting his influence to good purpose in several matters, but without attempting any display whatever. It was no wonder that he should have stood forth promptly as her champion, and entered earnestly into a defence of the moral character of his constituents, who seem really to have been attacked unreasonably and wantonly. At the time when he wrote, indeed, there were very peculiar causes in action to elevate the condition of the operatives in the New England manufactories. The high tariff of duties, of whose burdensomeness upon our

country generally, for the encouragement of the production of certain commodities, there were such loud and reiterated complaints, enabled these establishments,—we do not undertake to pronounce here whether impartially and wisely instituted,—to arrange so high a rate of wages as to invite a class never before or elsewhere engaged in such works. The young women of New England found themselves able, with a few years' or perhaps even a few months' labor, to lay up a comfortable dowry, with which upon marriage they purchased the economical furniture of a house or farm. These girls were in every sense, as a body, well educated. Their present comfort and future prospects shielded them from all the elements of temptation, which elsewhere tend to corrupt and destroy. Of a good race, brought up morally and piously, accustomed to read and supplied with abundance of books of every kind, entertained and instructed by excellent teachers in pulpits and lecture-rooms, with no cares or anxieties or overtasks to annoy them, we find them enjoying a certain amount of ease and leisure; forming pleasant social circles for reading and conversation; editing a magazine, and even, when such was the fashion, publishing an Annual or Illustrated Christmas Souvenir. Pity that Justice, stern and impartial, contemplating a picture so agreeable, should demand the abolition of these enviable privileges, and interfere with a system so well adapted to the convenience of all who could participate in its advantages! There was no doubt, however, of the success of Dr. Bartlett's defence; and his statistics will always retain a high value for their curious interest, as portraying an unprecedented and very happy state of society.

In Dr. Bartlett, the faculty of imagination was always strong enough to illuminate and vivify all the workings of his intellect. At the close of his career, when his cruel disease, passing by the better part of him, had impaired and almost taken away his capacity for physical enjoyment and action, we find the poetical element of his mind displaying itself in a charming way. He was always an ardent admirer of Mr. Dickens, whose personal friendship he enjoyed, and whom he had re-

ceived, while chief magistrate at Lowell, with an eloquent official address. In the seclusion of his declining days, he solaced his tedious hours by the composition of a series of verses, word-paintings from the tales of this gifted author, which he entitled "Simple Settings." These have been printed for distribution among his friends, but not published. No one can peruse them without admiration of the warm and expansive philanthropy which burned within the heart of the writer, in the midst of suffering and decay, undimmed by weakness and privation, unextinguished by the immediate prospect of death. "In this most pleasant occupation,—I cannot call it a labor," he says, in a touching dedication of the volume to those he loved,—he whiled away "many an hour that would otherwise have been vacant and weary" of his invalid existence. We will not withhold our earnest expression of respect for the firmness of soul that could thus employ and comfort itself under such circumstances.

Of his shorter and more fugitive essays we accord, perhaps, the highest place to an able article on *Œdematous Laryngitis*, published in the fifth volume of the *Western Journal*. It contains an eloquent eulogy of *Pathological Anatomy*; goes on to speak of the lesions inflicted by and characteristic of the disease, its mode of access, symptoms and signs; enumerates its causes, chiefly from *Valleix*; describes its varieties and forms, its march, duration, and termination, mortality, and prognosis; lays down the diagnosis, and maintains the theory of its inflammatory character, and finally points out the appropriate treatment. Under this last head he takes occasion to speak in terms of well-merited praise of the practice of *Dr. Gurdon Buck*, of New York, and the instrument invented by him for the convenient incision of the swollen lips of the glottis. He concludes with a definition of his subject, of which he gives a very complete history and bibliography. The whole paper is a model of its kind.

In this connection should be mentioned, also, "A Brief Sketch of the Life, Character, and Writings of *W. Charles Wells, M.D., F.R.S.*," read before the *Louisville Medical*

Society, December 7th, 1849. This elegant tribute to the memory of a neglected and almost forgotten fellow-countryman, one of the most truly scientific members of our profession, a South Carolinian, whose political ostracism as a Tory of the Revolution, seems almost to have reached the cruel severity of denying him his posthumous fame, does honor alike to the head and heart of Dr. Bartlett. Nor should we omit to speak of his "Discourse on the Times, Character, and Writings of Hippocrates," delivered as an Introductory Lecture to the Trustees, Faculty, and Medical Class of the College of Physicians and Surgeons, at the opening of the session of 1852-53. This little tract displays considerable erudition; a degree of acquaintance with the career and works of the Father of Medicine, very uncommon among modern physicians, especially on this side of the Atlantic; while it exhibits a brilliant fancy, an elastic imagination, and much critical acumen and judgment. It is, indeed, matter of wonder into what brief compass he has condensed so much of what is most striking and valuable, in the biography and teachings of the Coan sage.

We will not attempt to recount here the entire list of his passing contributions to literature and science, and the several public addresses and reports, which, in his official and legislative functions, he was called upon to prepare. His pen, we may truly affirm, was never idle. He was sole editor for awhile of a "Monthly Journal of Medical Literature," published in Lowell; this was soon merged in "The Medical Magazine," in the conduct of which Drs. Pierson and Flint were his coadjutors, and which continued in existence for about three years. He was an occasional and not unfrequent contributor after that time to the periodicals of several sections of our country, and his name appears on the list of collaborators to the most valued and successful of them all,—the now venerable and time-honored "American Journal of the Medical Sciences," so long and so ably edited by Dr. Isaac Hays. He thus gave the most convincing proofs of his indefatigable industry, and his unyielding capacity for useful labor; for, be it remembered, he was all this while engaged in

preparing and delivering courses of lectures in the several medical schools, in which, from time to time, as has been stated above, he occupied important and prominent professorships. Indeed, for eight or nine years, he taught at Woodstock, Vermont, in the summer, while he was engaged in winter sessions in the distant State of Kentucky. "He was," says Dr. Huntington, "one of the most popular and attractive lecturers. Never was the professor's chair more gracefully filled than by Dr. Bartlett. The driest and most barren subject, under his touch, became instinct with life and interest; and the path in which the traveller looked to meet with briers and weeds only, he was surprised and delighted to find strewn with flowers, beautiful and fragrant." He ascribes to Dr. Bartlett's "person and demeanor a magical fascination," and dwells upon "his urbane and courteous manner, and the singular beauty and sweetness of his style."

While Professor of Theory and Practice in the Transylvania University, at Lexington, Kentucky, he published "An Inquiry into the Degree of Certainty in Medicine, and into the Nature and Extent of its Power over Disease," which attracted no little attention. Physicians who exercise the invaluable privilege of free thinking, becoming conscious of their own inevitable scepticism, are very apt to suspect that this state of doubt, uncertainty, and defect of confidence, is a prevailing condition in the minds of the people around them. This notion, which seems to have impressed Dr. Bartlett, is, however, entirely without foundation. Notwithstanding the sneers of the philosopher, the broad laugh of the humorist, and the sarcasms of the witty and the wise, the world has never felt or exhibited any lack of faith either in physic or in the doctors who prescribe it. Hence it becomes curious and interesting to observe how little has been established in the prosecution of the argument by which the author seems to be endeavoring rather to convince himself than others, who, as regards the majority, already believe a great deal more than he attempts to prove. He has chosen Pneumonia as "a fair subject for the illustration of his inquiry." Louis, his great master and exemplar,

comes slowly and cautiously to the conclusion that the familiar and trusted remedy, venesection, is of some value, though much less than has been almost universally taken for granted. Certainly, he could scarcely have selected a topic more suggestive of doubt. At the present day, a very large proportion of practitioners neglect and repudiate the lancet in the alleged case: nay, Professor Bennett denies, if we understand his position, that its use is relevant as a cure for inflammation at all. His next specification, the influence of the antimonials, is liable to the same objection, and they, also, are now very generally abandoned. The two instances in which physicians seem agreed to speak with most confidence, are the administration of cinchona in periodic fevers, and that of iron in chlorosis and kindred forms of anæmia and spanæmia. But our views, even here, are clouded, not only by the repeated failures of these most vaunted specifics, but by the fact that so many other things are alike available, without our being able to detect in them any analogous or corresponding qualities. Thus we see intermittent fever cured by arsenic and common salt, and maize flour and cotton-seed tea, as well as by the Jesuit's bark. And the whole catalogue of chalybeates will sometimes fail to introduce the required proportion of iron into the blood of a female patient, who, at the return of an absent or neglectful lover, or upon a pleasant journey, or after a happy marriage, will bloom with a radiant glow, and promptly substitute the rose for the pale lily in her cheek.

It seems to us that we should be especially cautious in handling this question of the certainty of medicine; at any rate, we must contend that the ordinary modes of examination and discussion do not apply here. We are in somewhat a similar condition with the navigator, who traverses the sea by means of the appliances still familiar, as they were the exclusive resource in former days, when steam was unknown as a motive power. Unable to predict or control the waves, winds, or currents, he still exerts, by his care and skill in the use of his canvas, wheel, and needle, a most undeniable control over the management of the voyage, and the safety of the vessel.

A more elaborate work, and one of considerable extent, in the preparation of which Dr. Bartlett appears to have expended much labor and thought, is his "Essay on the Philosophy of Medical Science." There are, indeed, not a few who regard it as his best and most successful effort; and, although it has never been very popular in the ordinary sense, it has undoubtedly exercised no little influence upon the current of technical opinion since its publication. On many accounts it deserves a somewhat careful analysis and review. It is composed throughout in his very lucid and agreeable style; the doctrines presented are forcibly and neatly expressed; the illustrations generally well chosen; and the reasoning, for the most part, fair and logical. At the time when it was written, the school of Broussais, so loftily in the ascendant of late, was fast falling away, and his peculiar views becoming to be regarded as untenable and obsolete. By a reaction, which experience has shown to be universal, and which in fact would seem to be a sort of mechanical necessity of human thought, the reign of abstract speculation or theoretical inductions being over, a stringent and dry dependence upon mere facts, observation of notable and palpable phenomena, usurped the sway, and, commencing brilliantly in the methods of the patient Louis, attracted at once, and soon enlisted a great proportion of the young and ardent spirits who were then entering upon a course of medical study. By a similar necessity, which experience proves to be equally uniform, this reaction went far beyond truth and nature, and swept away, even into an incongruous sort of enthusiasm, the more earnest and imaginative, a class which would almost irresistibly be led to the most remarkable excesses. Accordingly, we find in "The Philosophy of Medical Science" of Professor Bartlett the extreme exhibition of the doctrines of this numerical or statistical school, both negative and positive. Facts, and nothing but facts, are deemed worthy of notice or record: their relations to each other may also be taken into consideration, but still under the category of facts only so far as they come within our actual observation, and in no wise as matters of inference

or deduction. All theories are thrown together into one heap, and scornfully condemned as a mere mass of rubbish, without distinction of source or character. The most irreverent disregard of authority forms a part of this overwhelming deluge; and all medical literature is denounced, except in so far as it consists of a record of facts, phenomena. "Opinions and beliefs, hoary and venerable from age," says one of the admirers of this essay, "were remorselessly brought under the operation of the dissecting knife;" say rather, the extirpating and amputating instruments of knowledge, and the most searching and destructive actual cautery. "Medical doctrines, as they have been held by Cullen, Brown, Rush, Broussais, Hahnemann, and a host of others, greater or lesser lights, are consigned to one common tomb, as being all based upon a vicious philosophy, and supported by a false logic. All theorizing, all hypothesis, all *a priori* assumptions, no matter how plausible and ingenious, are repudiated by this zealous disciple of the school of medical observation, so called." "This school," says Dr. Bartlett himself, "is characterized by its strict adherence to the study and analysis of morbid phenomena and their relationships, by the accuracy, positiveness, and minute detail which it has carried into this study and analysis, and by its rejection, as an essential or legitimate element of science, of all *a priori* reasoning and speculation. It is the true Protestant school of medicine. It either rejects as apocryphal, or holds as of no binding authority, all the traditions of the fathers, unless they are sustained and sanctioned by its own experience."

Such a school as this may indeed be well entitled the Protestant School: since, to use the phrase of the Countess of Hahn-hahn, it is "capable of nothing but protesting." To restrict us within the narrow circle of our own observation and experience, is to shut out, if consistent with itself and tenacious of its own fundamental principles, all hope of progress. If "the traditions of the fathers are to be held as of no authority in themselves," why are we to assign any weight to the recorded observations of the sons? All are alike to be tested,

"sustained, and sanctioned by our own experience;" each for himself, in his own limited opportunities of inquiry and annotation. If we are to except any names from this sweeping denunciation, why not those of Cullen and Broussais, as well as those of Louis and Jackson? If,—as Dr. Bartlett lays down dogmatically in the first of his "five primary propositions,"—if "all medical science consists in ascertained facts, phenomena, or events, with their relation to other facts or phenomena or events, the whole classified and arranged," how small a portion of the vast field will it be possible for one mind to occupy, all dependence upon authority being denied us? If we admit any other facts or phenomena than those we have ourselves observed, whose shall we accept? What is meant by relation or relationship of facts to each other? Richardson defines the words as implying connection, conjunction. Shall we inquire how they are connected or why they occur in conjunction, or must we reject such inquiry as speculation and hypothesis? Whose judgment shall we admit in regard to this point? And as to "classification and arrangement of phenomena," surely this is matter of reasoning, which cannot be resolved into and decided by mere observation of the phenomena. On the contrary, we hold, that observation is chiefly or exclusively valuable as it affords food for reflection, for reasoning. We may almost affirm, as it has been written, that to "think is to theorize."

Dr. Bartlett goes on, in his "fourth proposition," to state that "medical doctrines, as they are called, are, in most instances, hypothetical explanations or interpretations merely of the ascertained phenomena and their relationships. All medical science is absolutely independent of these explanations." We feel compelled to enter here our deliberate protest against these views, fully believing that in the progress onward from the known to the unknown, there are no possible methods which shall exclude hypothesis, theory, reasoning, deduction, and induction. The mere "observation of facts, phenomena, events, and their relationships," undisputedly of absolute and indispensable necessity, as affording basis and

material, will never advance us one single step forwards or upwards. By other wings must the soul rise in her flight; by other faculties and functions must she make her way to the lofty regions of truth and wisdom. And how impossible the plan thus laid down for the construction of any science or department of science! Where shall we stop in our collection of facts? "Particulars are infinite," says Aristotle. Bacon tells us, "The sea of examples has no bottom." Besides this, no one questions the truth contained in Cullen's seeming paradox, that "there are as many false facts in medicine as false theories." Who shall guarantee the competency of any observer always to distinguish the real from the apparent? Dr. Bartlett speaks of the capacity as rare and elevated. At any rate, it is always easier to subject false theories to a proper test, that of reason, than to dispose of assertions so often contradictory. It will be difficult, nay impossible, to pass upon or verify all alleged facts. "Time is sometimes lost," says Theophilus Thomson, "in the laborious accumulation of miscellaneous facts. Numerism is only productive by the amount of 'dry light'—Bacon's *lumen siccum*—intellectual intuition, applied in the selection and appreciation of facts. There is an aristocracy of facts as well as of races; and the mind should be taught to discern their prerogative dignity. The naturalist who cannot or will not see that one fact is often worth a thousand, as including them all within itself, and that it first makes all the others facts; who has not the head to comprehend, the soul to reverence, a central observation or experience—what the Greeks would, perhaps, have called a protophænomenon—will never receive an auspicious answer from the oracle of nature." It is indeed to be feared that few are thus qualified. Of the great majority, it may be affirmed, that "they have ears, but hear not; eyes have they, but they see not," or "see as through a glass, darkly," a glass colored by prejudice or dimmed by ignorance. We are reluctantly forced to acknowledge that there is too much truth in Quetelet's harsh characterization, when, in his "Essay on Probabilities," he describes medical statistics as "Observa-

tions incomplete, incomparable, suspected, heaped up pell-mell, presented without discernment, or arranged so as to lead to the belief of the fact which it is wished to establish; and nearly always it is neglected to inquire whether the number of observations is sufficient to inspire confidence."

Medical science cannot exist without a correct appreciation of the facts accumulated; without an inquiry into their proper meaning or significance; without an understanding of their relationship to each other, its nature and conditions. In order to such interpretation, without which progress is not to be hoped for, hypotheses and theories have been found essential in all the sciences; there is no other possible method. "If," says a recent ingenious writer, "if there is any inquiry in which mere comparison of facts might be expected to be adequate, it is the purely mathematical, for here we have, as we may say, a complete analysis already performed; and if, in such cases, we find conjecture or hypothesis occupying a prominent position, we may reasonably infer that in other cases it will not be of less importance. It would be sufficient to appeal to mathematicians on this question, but fortunately we can produce historical proofs. Kepler's investigation of the orbit of Mars was nothing more than 'trying successive hypotheses until one was found which fitted the phenomena;' and, moreover, the ellipse which finally appeared to satisfy the conditions, did not give results identical with those of observation. Such also was the character of Kepler's inquiry into the relation between the distances and periods of the planets, which, notwithstanding the simplicity of the law, was long unsuccessful. In another case, again, even Kepler's unequalled industry and ingenuity failed to discover, in the numerical facts before him, the simple law of their dependence, namely, in the case of the law of refraction. These two last cases may almost be considered as *instantiæ crucis*, between the mechanical and rational methods."

It is against this rational method that Dr. Bartlett directs his most forcible invective. In his "Hippocrates," he eulogizes a "simple philosophical empiricism," as contrasted with

"dogmatic rationalism;" and makes the grand old Greek "warn his hearers"—a supposed medical class—"against the seductive and dangerous influences of the philosophers!"

"But," the author above quoted goes on to say, "but we are able to cite another instance from that which is often represented as Newton's great induction, the establishment of the identity of gravity with the earth's attraction on the moon. Newton remarked that gravity acted at all distances from the surface of the earth at which the experiment had been tried; and the question struck him,—might it not extend as far as the moon? and if so, might it not be the force which, varying inversely as the square of the distance, retained the moon in her orbit? He made the required calculations, and obtained a result near enough to encourage farther inquiry, had he thought the suggestion probable. But it must have seemed to him, at best, extremely doubtful; for the slight deviation from exactness in his results, induced him to give up this investigation for fourteen years. Thus, the first step in the great discovery of Newton was a conjecture, and one which the author was perfectly aware was not logically warranted; nay, which he apparently thought extravagant."

We are, then, fairly entitled to the conclusion, not only that scientific inquiry does not exclude the use of conjecture, hypothesis, theory, or *a priori* reasoning, but that they have been found essential instruments in working out the most important and best established discoveries in science.

Still more earnestly would we protest against the tone in which Dr. Bartlett discusses the several theories which have at different times prevailed among medical men, and speaks of their authors. His good taste and refinement should have prevented him from confounding in one sweeping denunciation Cullen and Brown, Broussais and Rush, Gallup and—*proh pudor*—Samuel Thomson. Honored for aye be the name of Cullen; and let no man who respects in his fellows the capacity for profound thought and ingenious reasoning utter one irreverent word concerning Brown, or Broussais, or Rush.

Even Hahnemann, heretic and charlatan as he was, deserved far better treatment than to have been mentioned in the same breath with Thomson, whose coarse crudities it has pained us to see dilated upon in a work full of striking suggestion and elegant erudition.

The history of all branches of philosophy abound with examples which prove that it is the very nature of progress to ebb and flow, to diverge from the central straight line on this side and on that, to wander in every direction. By these discursive movements only can the whole field of knowledge be explored. The scholiasts, the sophists, the polemic disputants of all ages, the intellectual gladiators of every nation, rendered this service to truth, that they carried out fairly and fully the exhaustive process, reducing themselves or their adversaries to the confession of error, and illustrating the tendencies of all forms of doctrine. Wherever the light of mental research is thrown upon any topic, something must be gained. There is, perhaps, no single dogma in any science, even now, so well established that it is not liable to be assailed and controverted. "Our knowledge," said the dying La Place, "is trifling; our ignorance is immense." The imputation of error does not entitle any one among us to sneer at the views of any other. Dr. Bartlett maintains that facts, phenomena only, are to be studied. His opponents contend that causes are to be sought for, laws ascertained, principles deduced. Which is right? or, are we all wrong?—and is Dr. Bartlett himself to be placed in the same category with the herd of theorizers he denounces? Surely not! The very errors of great men are instructive. Not one line has been written in vain by those whose intelligence has placed them among our leaders; and the student who, in the course of his youthful reading, has not made himself acquainted with the works of Brown, and Cullen, and Rush, will scarcely ever be fitted to attain any high position in his profession.

We object again to another of the propositions laid down in the book before us. It is here affirmed, in strong terms, that our entire stock of pathological and therapeutical knowledge

is loose, bare, and disjointed; that our pathology is not in any manner or degree derived from, or connected with our physiology; and that our treatment of disease is entirely independent of our pathology. The barrenness of anatomical skill is dwelt on, and Jefferson is quoted, to show that no great amelioration of the practice of medicine has been derived even from Harvey's discovery of the circulation of the blood. It must be confessed that here, as elsewhere throughout the entire essay, Dr. Bartlett reasons ingeniously, and that there is a lamentable plausibility in his conclusions. Yet still, it is not difficult to show that here, as elsewhere, he has pressed his views into untenable extremes. Surgery has benefited directly by Harvey's discovery, and practical medicine is inseparable from surgery, whose resources are all made available to her. We tie the carotid, not only in aneurism, but for the relief of epilepsy and other cerebral diseases. We appreciate, in consequence of our knowledge of the circulation, all the organic affections of the heart, and all the indications afforded by the pulse, better than the ancients did. But we will not multiply examples. It is true that our physiology being still unsettled and progressive, we cannot hope to build upon it as yet a stable pathology; but scientific reasoners, both of ancient and modern times, have most earnestly urged the endeavor to connect them as far as might be. However wild the notions prevailing of normal or healthy life, they can be shown always to have influenced strongly and directly the received practical formularies of the existing schools. Acid acrimonies were attempted to be dulcified or corrected; hot maladies were treated by a cooling regimen, and cold ailments by alexipharmics and cordials. At no time in the history of our science did a pure empiricism hold sway, as asserted by Dr. Bartlett. Now, having changed our theories, we reason and reflect with the ingenious Marshall Hall, and the sagacious Holland; we endeavor to excite or restrain reflex actions; we endeavor to diminish sensitiveness and irritability, and subdue irritation. We institute nice chemical analyses, and pry into the developments of the microscope; we administer alkalies and

vegetable acids to correct supposed toxæmic conditions, with Babington, and Bird, and Fuller; introduce iron and salts into the blood, with Stevens and Meigs, and aim at the removal of an oxyluric diathesis, with Houston. Thus, with one rationalist, we supply a supposed deficiency of fatty matter in phthisis from the liver of the cod; with another we purvey the required bone-earth, the phosphate of lime; and with a third, offer the hyperphosphates to carry into the organism the necessary amount of phosphorus.

Let it be understood that we do not affirm or contend for the truth or correctness of any of these notions; we only maintain what Dr. Bartlett repeatedly and in many modes denies, that they all recognize and are built upon an alleged connection or dependence of Therapeutics, upon Pathology, Physiology, and Anatomy. He really seems to argue that such dependence should not be founded on or even sought for, and that a preference is due to an empiricism absolutely insulated and unreasoning, so exclusive is his reliance upon mere observation of facts, and so ready is he to confound all reasoning, with the speculation and hypotheses so eloquently denounced. To the last allegations just commented on, it has been well responded, that if Anatomy does not teach Physiology and Pathology, still it is at least equally true, that neither Physiology nor Pathology can be learned without some knowledge of Anatomy, and that if Therapeutics are not suggested by Pathology and Physiology, still the general treatment of diseases is better conducted by one who knows all that is taught in these departments.

"Dr. Bartlett," says one of his contemporary critics, "writing against all theory, is obviously under the influence of one himself, as an earnest disciple of the French numerical school. It would be difficult to select a more remarkable instance, than is furnished by our learned and ingenious author, of the impossibility of writing on medicine, without becoming the advocate of some system. Evidently his is a mind thoroughly imbued with the true inductive philosophy. His conceptions of what constitutes science are eminently just (?), and yet

while repudiating all hypothetical speculation, he gives indubitable proof of being under the dominion of a mere hypothesis. His work might be called *An Essay on the Architecture of Medicine*. It places in bold relief the different columns and pillars; he has wrought out each part in exact and due proportions; they are finished in a masterly manner. But the architect is unwilling that the edifice should be constructed; each part must stand separate and alone; and although he sees that the parts are made to fit into each other, yet he declares that this is only in appearance and not in reality; that they are in fact isolated, and so they must remain."

We have thus frankly indicated what we deemed to be the errors and defects of this very able and ingenious essay. The length to which we have extended our remarks, will best indicate, under the circumstances, our opinion of its actual value. It is a much more grateful task to speak of its excellencies. It was particularly well-timed, and addressed effectively to the requirements of the profession, at the period of its publication. It breathes a spirit of thoughtful and considerate scepticism, which was then needed to temper the headlong habit of confident polypharmacy prevalent over our country. To Rush, perhaps, more than to any other teacher, must we impute the unquestioning faith in, and daring resort to the most heroic remedies, so peculiarly, though not exclusively, American. While some abstracted from their unfortunate patients pounds of blood, others were administering, with equally bold hand, ounces of mercury. Earth, sea, and air were ransacked for vehement agents, to be profusely, nay, almost blindly employed.

It was, indeed, demanded that some earnest and persuasive voice should be raised, to check these irrational proceedings. This we feel to have been "the mission" of Homœopathy, at least in part; but there was so much imposture and delusion, mingled with the challenge, that it would have been disregarded by the orthodox disciple of the schools. When addressed, however, by Bartlett, on this side of the Atlantic, and on the other by Forbes, he stopped to listen and consider. These

gifted men spoke with authority; they pleaded impressively, eloquently, wisely. If, in the natural ardor of controversy, they went somewhat too far, let that slight fault be forgiven for the great good they accomplished. Nay, let them be honored for the courage and frankness with which they attacked prevalent error, and risked their popularity and position, by assailing modes of practice, rendered familiar by custom, and everywhere adopted and trusted to.

We have not followed in this notice of Dr. Bartlett's writings, a strictly chronological order, as will be perceived. We have reserved for our concluding remarks, his "Treatise on the Fevers of the United States," of which the first edition was published in 1842, and a fourth has recently appeared, under the care of his distinguished friend and colleague, Professor Alonzo Clark, of the College of Physicians and Surgeons, New York. Upon this work principally rests the reputation of Dr. Bartlett, both at home and abroad. It is a monument to his memory, which will never be permitted to perish.

Adopting cordially the sentiments and language employed, we transcribe the following paragraph from the January number, 1858, of the "British and Foreign Review." They serve to manifest the lofty estimate placed by our transatlantic brethren, upon the character and standing of our author. "We hail with pleasure the fourth edition of a work, on which, many years ago, one of our predecessors bestowed the attention demanded by the importance of the subject, and the skill and learning with which it was discussed. It is pleasing to us to learn that the public voice has confirmed the opinion we then formed of 'Bartlett on Fever,' but the pleasure is not unmixed, for the gifted author is cold in the grave, to observe, think, and write no more for the benefit of mankind. But, as the Greek proverb says, 'A tree never wholly perishes;' and much of the worth, much of the utility of many men now living, is probably due to the example and labors of Elisha Bartlett. A man's good deeds live after him; and it is good that it should be so, for thus is the world progressive."

Difficult, indeed, would it be to speak in terms of too high eulogy of this excellent volume. It is a model of its kind, unequalled in value by any similar work upon the same subjects. The extensive research, the exact precision, the careful accuracy, the judicious selection of particulars, the convenient arrangement and collation of details, all show the clearness of the author's intelligence, and his peculiar fitness for the task undertaken by him. Nothing known at the time seems to have been omitted; nothing exaggerated, nothing colored for effect.

We say thus much, not because we accord with him in all the views which he advances and urges in this book, with so much force and ability. We do not think that he has laid sufficient stress, for example, upon certain facts bearing on the controverted question of the identity or specific distinctness of typhus and typhoid fevers, but it must be admitted, on the other hand, that he has stated them in such a way, as to enable an attentive reader to form a judgment for himself. Indeed, it is vastly to his credit that one of his foreign critics, while ascribing the highest merit to his controversial exhibition of the argument, and acknowledging the great influence which he exerted upon the public mind, in giving direction to the now prevailing opinion, goes on to suggest that the settlement of the question seems actually to have been retarded, by his forcibly impartial presentment of the doctrines opposed to his own.

Nor must we omit to assign him the farther merit of anticipating, in some degree, the actual course of inquiry and technical judgment. The tendency of professional thought is, at the present time, undoubtedly towards a subdivision of many classes, and a more careful separation of particulars that have been considered identical, or intimately and essentially connected. Specific differences are now dwelt on, where formerly mere varieties were recognized or admitted. Continued fevers are still subjected to this searching analysis, and, although there yet remain some doubters, it is clear that the controversy as to the relations of typhus and typhoid is

now much narrowed. Men of note have been led one after another, like Watson, to yield to the accumulated evidence and the cogent reasonings presented. It is the more to be regretted, however, that Dr. Bartlett should have adhered to and confirmed the unfortunate and inconvenient name, which his French teacher, Louis, affixed to the more familiar affection, and which is now difficult to be got rid of. The new title of "Enteric Fever" which Professor Wood has, with so much propriety and consistency, conferred upon it, should by common consent and universal usage, be employed to designate it.

Further distinctions, hinted at in the preface of the first edition of the work before us, will perhaps demand acknowledgment and require a nomenclature.

Thus, in the clear and graphic description given us by Dr. Jenner, of what he calls "Relapsing Fever," referred to by Bartlett with such hearty and well-deserved encomium, we find ourselves under the necessity, either of admitting a new and hitherto unrecognized form of Continued Fever, as Jenner regards it, or of rejecting this classification, and assigning it a separate place among Periodic Fevers. If we choose the former alternative, we shall encounter the difficulty of a contrast with all others of the same class, which if they ever attack a second time, certainly are less apt of occurrence than at first. If we place it among Periodical Fevers, we must either regard it as deriving its existence like its congeners, from malaria, or not. If not, it stands, so far as we know, alone. If it does, we must recognize, in its wide domain of indicated localities, sources of malaria and sites of its influence hitherto entirely unsuspected. As a non-malarious periodical, it will be absolutely without an analogue, unless we arrange by its side the "Mountain Remittent," so termed, of California.

The whole order of Malarial Fevers must also undergo close examination, and be distinguished by narrower as well as more precise limits than have thus far been established between them. Intermittents differ palpably among themselves. An ague, the "chills and fever" of the common people, should not be confounded with intermittents, such as are not unfrequently

met with, running through a long and entire course, and regularly too, without any chill whatever. Nor does it seem reasonable to class promiscuously together, all the rhythmical varieties of intermittent, so specially attached to definite localities, and so rigidly kept separate in nature. In one place we have tertian and its complications, in others, quartans, which are rare elsewhere; in some places, quotidians abound; in remote districts, as in Russia, we read of settimans and octomans, never met with here or in Great Britain. This exclusive or prominent prevalence, surely seems to indicate a peculiarity in the causative morbid agent.

Remittents, too, are in a similar manner strongly marked by widely diverse characteristics. Not to speak of the now familiar admission or recognition of a so-styled "Congestive Fever," we have abundant and excellent authority for the belief, that the periodic or intermittent fevers, of the middle and piedmontese country of the South, differ palpably from those of the lower alluvial districts; the fevers of the cotton fields from those of the rice lands. The possible acclimation of the negro in the latter, comparatively striking in degree, if not absolute and complete, offers a strong contrast to the impossibility and non-occurrence of the like acclimation in the upper country, as affirmed by Nott and others, of unimpeachable competency. Of the African Coast fevers, we may collect from "Bryson's Reports," many statements to the same purport, which deserve to be noted in confirmation. The island of Fernando Po is inhabited by a robust athletic tribe of negroes, but its climate is deadly to the natives of any portion of the neighboring continent, or of any of the other islands along its shores. We also find Dr. Livingstone's black companions, during his wanderings in the interior, seized with fevers always or almost with certainty, on traversing regions to which they were strangers. We can hardly help concluding from these circumstances that the febrile malaria of every district, contains within itself something peculiar and specific, capable of impressing a relevant and definable modification of the type and character of the fever it is causative

in producing. For such a *nova cohors februm*, we suppose, room and place must be found, sooner or later, in our books.

In many parts of this admirable volume we shall have occasion to notice the indifference to authority, and the disregard of respected names, so characteristic of our country, and for which Dr. Bartlett, in his earnest search after truth, was ever remarkable. Like other compilers, also, he has allowed himself too readily to balance one authority against another, without the requisite consideration of their relative weight; thus illustrating what the most eminent wit and poet of our profession in America has recently alluded to with humorous felicity, as "the hydrostatic paradox of controversy." This is more particularly to be regretted in the portion of the work in which yellow fever is treated of, where he has fallen into repeated errors from unquestioning reliance upon miscellaneous monograph essays, and from want of such guidance as he would have derived from the opportunity of personal observation and inquiry.

He has not, indeed, entirely escaped the same danger in his history of periodical fever, especially the form of bilious remittent; and thus the value of the latter half of the book is somewhat impaired. But with all these allowances, it must be admitted to have attained a degree of excellence rarely to be hoped for, and certainly never surpassed.

Not long after the publication of the third edition of this, his greatest and most successful work, Dr. Bartlett found his intractable malady gaining ground on him so much as entirely to incapacitate him from labor. He therefore resigned his professorship, and withdrew from all participation in business. Retiring to his quiet home in Smithfield, Rhode Island, he was received by his friends with the warmest affection, and attended with all care and gentle assiduity. Here, in the seclusion of his sick-chamber, he solaced himself with the delights of literature; with the composition of verses upon grave subjects connected with and expressive of the warm philanthropic energy which had rendered active and illustrated his whole life and character; and with those profoundly religious senti-

ments of faith and gratitude, which had ever sustained and soothed him; and, finally, he sunk into his last sleep, after tedious suffering, most patiently and manfully borne, in bright hope and confident expectation of a blessed immortality.

So labored, so lived, and so died Elisha Bartlett; and thus he deservedly attained an eminence among the physicians of our age and country enjoyed by few. Let his virtues and his worth be held in perpetual remembrance.

SAMUEL HENRY DICKSON.

MORETON STILLÉ.

1822—1855.

MORETON STILLÉ, the youngest son of John and Maria Stillé, was born in the city of Philadelphia, on the 27th of October, 1822. Upon his father's side the family was of Swedish origin, its earliest member, of whom anything positively is known, being Olof Person Stillé, who emigrated to this country with the first Swedish colony, in the year 1638, under a passport or letter of recommendation from Eric Bielke, Lord of Wyk, Peningby, and Nyñas, in Upland, Sweden. Shortly after their landing on the banks of the Delaware, the Swedes established numerous settlements, principally on the western bank of the river. Olof Stillé's place of residence, marked on Lindstrom's map as "Stillé's land," was situated on what is at present termed "the Neck," and is the only homestead, Mr. Watson informs us, now known of any of the Swedish families whose names are on the list taken in the year 1693, for the information of William Penn.

On the maternal side, Dr. Stillé was descended from the family of the Wagners, one of whom came over to this country and settled as a clergyman in Reading, Pennsylvania, in the year 1759. Mr. Wagner's father and grandfather were both of them clergymen, also; his great-grandfather was Tobias Wagner, Chancellor of the University of Tübingen in 1662. In the *Biographie Universelle*, vol. 1, p. 26, he is described as "un des Théologiens les plus habiles et les plus féconds du dix septième siècle," one of the most skilful and fertile theo-

logians of the seventeenth century. Few Americans can look back to a longer line of ancestry, settled in this country, than the family to which he belonged; and the tenacity with which they have clung to the spot where their first ancestor settled, is, in our country at least, somewhat remarkable.

Moreton Stillé began his school education with the Rev. Mr. Steel, at Abingdon, in 1831. In the following year he was placed at Edge Hill Seminary, Princeton, where his industry and capacity for learning, judging from his teacher's reports, some of which still remain, were considerable, and secured him a high place in his class. In 1838, he entered the Sophomore class of the University of Pennsylvania. During the whole period of his collegiate course he bore an excellent character, and was much respected by his fellow students for his gentlemanly bearing and conduct. He was a good student, and finally carried off an honor; but he took a peculiar interest in the proceedings of the literary society to which he belonged, the Philomathean.

Having chosen the profession of medicine as most congenial to his tastes, on the 17th of July, 1841, he began its study with his brother, Dr. Alfred Stillé. How admirably Dr. Stillé was qualified for the duties of a teacher, and how faithfully he performed them, it may not be proper to speak of; it is but justice to remark, however, that the even more than fraternal affection with which Moreton regarded him in after years, was greatly due to the feeling he conceived for him when his pupil.

In the following October, Moreton matriculated in the Medical Department of the University of Pennsylvania. During the whole course of his attendance upon lectures, he was an attentive and even zealous student; the profitable manner in which his studies were pursued, is evinced in the admirable Thesis he presented for his degree, which received the highest compliment that can be paid to a student's effort, the unanimous request of the faculty for its publication. He obtained his degree of M.D. in the spring of 1844.

In the month of October, of the same year, he embarked

for Liverpool, with the intention of remaining three years abroad. It may not be uninteresting to observe with what serious, and, at the same time, elevated sentiments, he commenced the journey which was to occupy a period in many respects the most eventful and important in his history. In the month of August, he thus writes to his brother Charles, who was then in Europe :

"I feel as if I were just commencing life in earnest ; as if I were just now setting out upon its untried sea ; as if I had yet to buffet its storms or feel its prosperous breezes. Indifferent to the present, I live only for the future ; upon it my most earnest gaze is fixed, and I strive to enter its ever-receding portals, to grasp its cloudy phantoms, its beckoning illusions. But, for all this, I am no dreamer. I would not, with closed eyes, lie upon the stream, and, the sport of its uncertain waves, be carried hither and thither. 'Conduct is fate,' and every man may make his future if he will. I go abroad with the determination, made neither hastily nor without reflection, to be 'up and doing,' and to profit by the privilege I enjoy to the utmost. If I know myself, I shall not be content with a place in the crowded middle ranks of the profession."

His plans were to pass some time first in Dublin, that he might avail himself of the numerous advantages it then offered to the medical student, but more especially to improve himself in physical diagnosis, for the cultivation of which many of its teachers were justly celebrated. The remainder of his time abroad, he expected to pass principally in Paris. Unforeseen circumstances, as will be shown hereafter, caused him to modify his plans, as his last winter was spent in Vienna.

After a winter in Dublin, Dr. Stillé repaired to London. His time had been so profitably and pleasantly spent in the former city, that he left it with much regret. The circle of society into which he was admitted, was not only refined and intellectual, but for one constituted as he was, possessed even a higher attraction in the ease and informality of its intercourse. He had also become acquainted with several of its most distinguished physicians, among whom

were Drs. Stokes, Graves, Churchill, Hamilton, Law, and McDonnell, from all of whom he received many civilities and attentions. He was, in particular, treated with marked kindness by Dr. Stokes, who evidently appreciated his good sense, and the earnestness with which he devoted himself to his studies. In his last letter from Dublin, he mentions with pride that for two of his most precious and flattering letters of introduction, to Dr. Todd, of London, and M. Louis, of Paris, he was indebted to that gentleman. His letters warmly and gratefully acknowledge all these attentions, undoubtedly the more valued and felt by him from his being a stranger there. To Dr. Stokes, into whose society he was much thrown, from his daily attendance at the hospital, he had become much attached, and his correspondence gives frequent utterance of the enthusiastic admiration in which he held that great physician's character.

The reception he met with from some of the London physicians was extremely kind, as the following extract will show :

"My letters to Drs. Todd, Murphy, and Marshall Hall," the latter kindly given him by Dr. Shattuck, of Boston, "I have delivered. I can only say at present that I have been delighted with the reception they have given me, and with the disposition they have shown to further my plans. I shall try to see a great deal of Dr. Todd ; he has been very kind to me ; I have been round his hospital, and heard him lecture, and am anxious to see more of him."

Of Dr. Hall's kindness to him, in particular, he frequently speaks :

"He is always," he remarks on one occasion, "wanting to know what he can do for me. He gave me, among other things, an introduction to the meetings of the London Medico-Chirurgical Society, which are held every fortnight, and where I have an opportunity of seeing most of the eminent men of London, and hearing their views on important points which arise in the discussion which follows the reading of a paper."

Early in May, Dr. Stillé left London, and made a trip to the West of England and Wales, revisited Dublin, and re-

turned to London, passing through Glasgow, Edinburgh, and York by the way. During the summer, he travelled through Holland, the Rhineland, and Switzerland, arriving at Paris in the middle of September.

Here his zeal for knowledge was again awakened. He says: "To tell the truth, I seem to have been, for the last few days, thrown entirely off my balance, and there is nothing I so strongly desire as to have my mind occupied in something that will make it think." And shortly afterwards, he adds: "I have now much less time at my disposal than when I last wrote, and I feel a pleasure in saying so, that can only be understood by one who has like myself remitted for so long a time any regular employment. I have a certain enjoyment in counting over my hours, and in saying to myself, such and such are usefully occupied."

Finding that, owing to the new regulations which prohibited private clinical classes in the hospitals, he could not pursue his studies to as much advantage in Paris as he had anticipated, Dr. Stillé left that city in March, 1846, with the determination of passing the next winter in Vienna. The intervening time was employed in travelling through Italy, Germany, and Sweden.

He reached Vienna on the 1st of October, and immediately commenced his attendance upon the daily post-mortem examinations at the hospital. He there became the private pupil of Rokitànsky, who treated him with extreme kindness, and thoroughly grounded him in the science of Pathological Anatomy. He was also an assiduous attendant upon Skoda's clinic, and under the distinguished teachers of the General Hospital, perfected his knowledge of urinary diseases, cutaneous affections, and the use of the microscope.

Dr. Stillé left Vienna with many regrets, and after making a tour through Turkey and Greece, in company with Mr. Stiles, the American Chargé d'Affaires, returned to Vienna about the latter end of May, whence he proceeded by the way of Linz, Salsburg, Inspruck, and Frankfort, to Paris. His

last letter to his brother, marked *ultima*, was from that city. In it he says:

“Six weeks of idleness, even in the gay city of Paris, have taught me that contentment and conscientious labor go hand in hand, and I am not sorry soon to have in view a life devoted to earnest and profitable study. The time I have wasted I hope to redeem, and that which I have well employed, will, I trust, bring forth good fruit.”

On the 9th of August, 1847, he embarked from Liverpool for home, bringing with him, besides a collection of medical works, chiefly German, a variety of anatomical models, selected from Thibert's series of *Pathologie Interne*.

From the great attention which he paid to his medical pursuits while abroad, it would be incorrect to imagine that study, though his chief, was his only occupation there. His views and tastes were far more expansive and generous. Impelled by a strong desire to see those places and objects which are renowned in the world's history, or famous as the creations of man's genius, he visited, during the summer vacations, nearly all the countries of Europe. In many of his letters he describes, *con amore*, the genuine gratification he felt on these occasions; in fact, of all his recollections of foreign life, such seasons of delight were most treasured by him, nor can it be doubted that they exerted a very happy influence upon his character.

Shortly after his arrival in Philadelphia, he took an office, with the intention of devoting himself to the practice of his profession. For this, I need hardly say, he was in every respect well prepared; his steady industry and large opportunities having given him much more experience than usually falls to the lot of commencing practitioners. During the year that intervened between this period and the following July, with the exception of several reviews written by him, I have no record of the manner in which he passed his time. Early in July, 1848, he was elected one of the resident physicians of the Pennsylvania Hospital, for the unexpired term of the late Dr. Morgan. He remained at the Hospital till March

the 28th, 1849, nearly nine months, receiving from its managers, at the close of his term, a certificate commendatory of his attention and good conduct.

Towards the latter end of June of the same year, malignant cholera, then epidemic throughout our whole country, broke out in its most virulent form in the Philadelphia Almshouse, Blockley. The care of the patients was at first undertaken by the Resident Physicians, but the number of the sick so rapidly increased that their duties became too arduous for them, and a separate cholera service was instituted by the Board of Guardians; to this Dr. Stillé and Dr. Edward R. Mayer were appointed physicians, in connection with a Medical Board, consisting of the Chief Resident Physician, Dr. Benedict, and the consulting Surgeon and Physician of the Hospital, Dr. Page and Dr. Clymer. The excessive malignity and rapid spread of the disease are shown by the fact that, out of a population of about 1400 persons residing in the house, the cases admitted into the Cholera Hospital from its opening on the 7th of July, until its closure on the 4th of August, numbered 222, of whom 192 died. The services rendered by the Medical Board and their assistants, during this period, were not only harassing and laborious, but involved in their discharge, as may be supposed, great personal risk. So poisonous, indeed, was the miasma that the health of several of them soon became seriously affected, and two of them, Mr. T. M. Flint, of Philadelphia, and Mr. J. Warren White, of Mississippi, gentlemen who had nobly offered their gratuitous services to the sick, fell martyrs to it, dying in the city, a few days after their removal from the Hospital.* Ten days after the commencement of his duties, Dr. Stillé was himself attacked with cholera, and narrowly escaped with his life. It took him a long while to recover from it, even as it was, so shattered was his constitution by the disease.

* See "History of the Epidemic of Cholera, at the Philadelphia Almshouse, Blockley," in the November No., 1849, of the "Medical Examiner."

On the 10th of October, 1850, Dr. Stillé was married to Miss Heloise Destouet, daughter of S. Destouet, Esq., of Philadelphia. The union was, in every respect, a happy one, leaving him, in his domestic relations, nothing to wish for. A few days after his marriage, he again sailed for Europe, accompanied by his wife, and his brother, Dr. Alfred Stillé. The first part of his time while abroad was passed in Italy, and the latter portion in Paris, where his eldest daughter was born. He returned to Philadelphia in the month of April, 1852, and resumed the practice of his profession. During the years which intervened between this period and his death, he endeavored to reap from the pursuit of his profession some reward for his long and conscientious studies; but the measure of his employment did not satisfy his expectations, or reconcile him to the truth that success in the attainment of practice is more frequently won by uninterrupted devotion to its daily duties, than either by native talent or by proficiency in the science upon which it is based. Like many others who had enjoyed advantages similar to his own, he was impatient to succeed, and did not rest satisfied with the attachment and respect of the comparatively small number whom his devotion and skill had made his debtors. He forgot, in fact, that the years of his absence were, as regards professional practice, lost years, although so rich to him in all the fruits of knowledge. Yet, had he lived to obtain what he desired so anxiously, it may be questioned whether he would not have looked back to those very years as among the happiest of his life, and perhaps expended many a sigh upon their not unprofitable tranquillity. It was during this period, I may mention, that he devoted himself to the experimental study of chemical analysis, and acquired a knowledge of it, which proved of essential service to him in the preparation of his work on Medical Jurisprudence.

A year before his death, a circumstance occurred which entirely changed the current of his thoughts and feelings, as it was about that period that the idea was first suggested to him by his friend, Francis Wharton, Esq., of writing a work on

Medical Jurisprudence, Mr. Wharton offering to undertake the legal part of it, should the project meet with his views. The proposition came at an auspicious moment, when the want of some steady employment was, as we have just seen, being daily felt by him, and in itself afforded so excellent an opportunity for the exercise of his various powers, that he almost immediately acceded to it. Of the intensity of his application, as well as of the conscientious spirit which actuated him in his labors, during the year which followed, his colleague, Mr. Wharton, in the just and touching tribute to his memory, contained in the preface to their joint work, thus speaks: "It was a year of patient and severe research, marked to an extent of which the annals of science afford few parallels, by the most self-denying industry, as well as by a rigorous and almost fastidious conscientiousness in the pursuit, not only of truth, but of the most appropriate terms by which that truth could be expressed."

In the month of March, 1855, he was appointed Lecturer on the Theory and Practice of Medicine, in the Philadelphia Association for Medical Instruction. The previous incumbents had been his brother, Dr. Alfred Stillé, and his friend, Dr. J. Forsyth Meigs, and the circumstance that he had been thought worthy to succeed such men, was both gratifying and inciting to him. I have understood that he had but two weeks to prepare himself for his post; and when it is considered that his lectures were written ones, and that at the same time he labored without intermission upon his Medical Jurisprudence, a good idea may be formed of the fatigue he must have undergone during this period. Yet he never once was absent from his post, nor spared any pains to render his instructions useful by procuring recent specimens of diseased structure, and employing in their demonstration, the knowledge he had gained with Barth, Engel, Rokitsansky, and others, as well as by his own dissections, and an extensive literary acquaintance with pathological anatomy. His lectures were listened to with interest and satisfaction; and the resolutions adopted by his class at his death, testify both their

high appreciation of his ability as a teacher, and his qualities as a man. With the beginning of June, his lectures terminated for the summer, and at the same time the last sheets of his posthumous work were passing through the press.

And thus, the bright prospect of future eminence and renown lay seemingly fair and open before him, and it only appeared needful for him to press onward with diligence and judgment, to be able to reach the goal with both safety and honor. But these hopeful anticipations were never to be realized. With every faculty of his mind intently engaged upon his labors, he either did not notice, or disregarded the gradually wasting and exhausting effects which such intellectual efforts, in conjunction with his sedentary habits, were producing upon a frame naturally delicate, and the unconsciousness continued, until he was suddenly made aware that his health was disordered; nor did he even then attribute it to the right cause, nor consider it of serious import. A trip to the sea-shore, he imagined, would speedily restore him to health, and enable him to return to his work with renewed vigor. With this view, he went to Cape May, intending to pass two or three weeks at the sea-side. The change of air was at first beneficial, as there was a manifest improvement in all his symptoms. Most unfortunately, he was shortly afterwards attacked with pleurisy, brought on by imprudently sleeping in a draught, after bathing. The attack was seemingly slight, but in his enfeebled condition, it greatly depressed and weakened him. Finding that he did not improve at the sea-shore, he returned to Philadelphia, and in a few days afterwards, accompanied by his wife and other members of his family, set out for Saratoga, which he reached, completely prostrated by his journey, which it had taken him several days to accomplish. And there, on the 20th of August, one short week after his arrival, soothed and ministered to by the affectionate care of those who were dearest to him on earth, his wife and mother and brother, he expired, in the thirty-third year of his age.

The character of Dr. Stillé may be said to have been dis-

tinguished rather by a combination of several excellent qualities than by any very marked or conspicuous one. No one faculty, either intellectual or moral, dwarfed or weakened by its overgrowth, the rest of his nature. ' He possessed a good intellect, a high sense of duty, and a resolute decisive will. Of these, the last faculty appeared to be the most striking feature of his character. Whatever he undertook, he applied himself to with a quiet determination, from which no obstacle or allurements ever diverted him for a moment. This steady, unwavering perseverance in the pursuit of objects was observed even in his early boyhood, and contributed, undoubtedly, more than any other quality he possessed to make him what he was. In its exhibitions, however, it was always subordinated to his judgment, and both guided and regulated by what he conceived to be his duty. His standard in this latter respect was ever of the highest, and what is rarer and more commendable, he lived up to it. Thus, in the very heyday of his blood, he visited Europe alone; and, though not compelled by necessity, the incentive that so many require to urge them onwards, to devote himself as ardently as he did to science, his sense of duty, as a responsible and moral being, was so much stronger than his youthful impulses, that neither the dissipations of Paris nor the gaieties of light-hearted Vienna could often wean him from the quiet of his chamber by night, or withdraw him from the duties of the hospital or the class-room by day. When he wished to relieve his mind from the severity of his studies, he did so; but his companions were men of sense and distinction, and his relaxation tended to the refinement of his taste and his improvement in general knowledge. The same conscientious spirit distinguished his course through life, and it deserves to be ranked among the highest virtues of his character.

His moral nature, besides the qualities I have indicated, was marked by integrity, truthfulness, and a contempt of everything mean or dishonorable. His views of right and wrong, of duplicity and plain dealing, were positive and uncompromising; nor was he one who was ever "ashamed to

avow what he believed to be true, or afraid to practise what he knew to be right." There was a steadiness and consistency of action and opinion in him in all these respects, which showed that his conduct was guided by principle rather than by impulse, and his whole course through life was strongly illustrative of it.

Another feature of his character, so personal to him that no one who knew him could fail to mark it, was his modesty, or, rather, his absence of pretension. To anything like display or self-parade, no one could ever be more averse, and it was largely owing to this trait, I imagine, that so few, even of his friends, were acquainted with the extent of his acquirements, as he very seldom spoke either of himself or his labors. Not that he was an unambitious man; on the contrary, "that last infirmity of noble minds" was a strong and even powerful element of his character. It was a high and worthy passion in him, however, that never seduced him from his principles, and was aimed at respect and honorable standing, not at notoriety or even popularity.

His attachments to his friends and family were strong and not easily shaken; in all the relations of life, in fact, he exhibited a bright pattern of excellence. He was a dutiful son, an affectionate husband, a kind brother, and a true and steadfast friend.

That he had his failings and shortcomings, there can be no reason to doubt, as they belong in greater or lesser degree to every one. No one acquainted with him, however, can fail to acknowledge that his moral nature was of a high order, as well as that no blot or blemish ever sullied his conduct in life, or can tarnish the fair name he has left behind him. In truth, he had that "chastity of honor," as Mr. Burke has happily termed it, that would have felt a stain like a wound, so sensitive and high-toned was his estimate of an unspotted reputation.

Throughout a good part of his life, Dr. Stillé was a methodical and industrious student; and though he could not be properly termed a learned man, his acquirements were various,

and far above the average. Thus, besides being an excellent classical scholar, he spoke and wrote both the French and German languages with ease and fluency, read the Italian, and soon acquired sufficient facility, whilst in Vienna, to enable him to understand Latin, the language then used by the professors in their clinics. Of his knowledge of medicine sufficient has already been shown, and I shall merely remark that it was especially large in the departments of general pathology and pathological anatomy.

His memory was retentive, and his intellect acute, clear, and well-balanced. Never led astray by the false colorings of imagination, he saw things in their true light, not as he might have wished them to be. Perhaps he was rather deficient in the imaginative faculty, and a larger development of it, by making him more hopeful, and enabling him to live more in the future, would certainly have added to his happiness.

In his intercourse with society, his bearing, though somewhat formal and reserved, was manly, courteous, and dignified. Everything about him, in fact, indicated the gentleman; a nice sense of propriety always marking his manner and conduct. His temperament was serious and contemplative, his inclination, even in early life, being rather for reading and study than for the usual pursuits of youth. He was not accustomed, openly at least, to look far forward for enjoyment, and was, perhaps, more apt to take a desponding than a cheerful view of the future and the present. No doubt the reflection that his studies and toils had not brought him a corresponding professional employment, tended to render his estimate of life sometimes a very low one, and to make him regret that he had not turned his attention to some other pursuit, in which the rewards of merit are earlier attained, as well as more valuable. Of this feeling he seldom spoke plainly, but he certainly entertained it, especially before the commencement of his Medical Jurisprudence. His labor on that work was a delight to him, and he evidently saw in it the beginning of a career of useful and agreeable occupation. The trait I have

mentioned was, nevertheless, far from rendering him gloomy ; on the contrary he was always cheerful, though seldom gay. This mood, no doubt, his happy domestic relations tended to encourage. In his home, he found all the social happiness he sought, and it was only from a sense of what the rules of courtesy required, that he sometimes entered into society. His domestic circle, a few friends, and his studies, filled his affections and his mind.

His acquaintance with books was not confined to medicine, even in its largest signification. The German was the language he preferred, and his knowledge of it rendered its literature a perfectly accessible source of pleasure. He sympathized deeply with the earnest tone and solid structure of the German mind, but had much less in common with the versatile genius of the French, or the fanciful mannerisms of Italian literature ; yet occasionally he read them all, and from all he drew what fashioned his own mind to a singular degree of acuteness in matters of literary and artistic taste, cultivated as it had been in respect to the latter by long familiarity with European art.

Dr. Stillé's writings consist of his thesis upon Cyanosis or Morbus Cœruleus, of numerous scattered articles in the medical journals of our city, including both reviews and original papers, and of his "Treatise on Medical Jurisprudence." It is not too much, I think, to say of all of them, that they are marked by good sense, information, and an easy flow of language. His style, in most respects, is a faithful reflection of his character. It is methodical, accurate, and dignified. As he never wrote upon subjects he had not studied and did not understand, his own ideas were distinct and well defined, and he communicates them clearly and without confusion to his readers. It may not be uninteresting to mention, also, that he wrote rapidly and easily, and that his manuscript was singularly free from erasures and interlineations. Composition, in fact, was no labor to him, as he was naturally endowed with a great mastery and facility of expression, and he found no difficulty in clothing his thoughts in appropriate language.

His thesis was published in the July number, 1844, of the "American Journal of Medical Sciences," and occupies eighteen of its pages. The phenomena of cyanosis, it may be briefly stated, were previously referred to one or other, and occasionally to both of the following causes: 1. Obstruction to the return of the venous blood to the lungs. 2. Presence of the venous blood in the general arterial system. Louis, Berard, Bertin, Ferrus, and others adopted the first explanation. Morgagni, Senac, Corvisart, Caillot, Labat, Bouillaud, and particularly Gintrac, of Bordeaux, who had written an excellent treatise upon the subject, based upon a consideration of fifty-three cases, advocated the latter view. This last theory is critically examined by Dr. Stillé, and is shown to be untenable, by the fact that in several cases mentioned by him, where the characteristic discoloration of the skin and other phenomena of the disease were present during life, the autopsy revealed neither an open foramen ovale or a defective ventricular septum, nor did there exist any abnormal disposition of the principal vascular trunks, by which the arterial and venous blood could commingle. Hence, he arrives at the deduction that cyanosis may exist without admixture of the two sorts of blood. By similar evidence he shows, secondly, that there is no proportion between cyanosis, and the degree in which the blood is mixed; thirdly, that complete admixture of the blood may take place without cyanosis; and fourthly, that the variation in the extent, depth, and duration of the discoloration is inexplicable by the doctrine of the mixture of the blood.

Having thus disposed of the popular theory which referred cyanosis to a mixture of arterial and venous blood as its cause, he then examines the remaining doctrine, which ascribes its phenomena to "obstruction to the return of the venous blood to the lungs," in other words, "to a congestion of the general venous system, resulting from some obstruction in the right side of the heart, or in the pulmonary artery, impeding the return of its blood to the lungs." If this latter theory be

true, the structural lesion which it assumes to exist, he states must meet the three following indications :

1st. That it shall account satisfactorily for the discoloration of the skin and the dyspnoea.

2dly. That it shall be found in every case of cyanosis, or if not, there shall exist in its place some cause acting upon similar principles.

And 8dly. That it shall never be found without the concurrence of cyanosis, or if it is, that a satisfactory explanation of the exception shall be given.

The limits of this paper will not allow me to enter into any particulars regarding his proofs of these propositions. I will only state, therefore, that of sixty-two cases, all that he could find recorded, in which the condition of the pulmonary artery was observed, it was either contracted, obstructed, or impervious in fifty-three ; while in the remaining nine cases, in which this condition did not exist, there were found much more important structural alterations, either of the heart or great vessels arising from it, and acting in the same manner upon the circulation.

The conclusions at which he arrives from a consideration of all the facts, are, that the essential characteristics of cyanosis are constituted by general venous congestion ; that there is no *one* lesion which is entitled to be considered as its anatomical character ; but that it depends upon any cause (contraction of the pulmonary artery being the most common), which acting at the centre of the circulation, produces a stasis of venous blood in the capillary system.

The variety of lesions found in the heart and great vessels of persons affected with cyanosis was the chief obstacle, it may be remarked, in the way of the previous inquiries, and it required the most careful classification and analysis of all the facts connected with it, to arrive at any definite result in regard to its pathology. In both of these respects, the paper is a model one ; it is clearly written, thorough in its sifting of evidence, and evinces high powers of reasoning, and although twelve years have passed since it was written, its results still

remain uncontroverted. Abroad, it has attracted the attention of all investigators of the subject. One of the most thorough among them, Dr. Norman Cheevers, says, in a paper published in 1847, *London Medical Gazette*, March, 1847, and *American Journal of Medical Sciences*, July, 1847, p. 207: "The opinion that cyanosis is exclusively due to the circulation of the venous blood through the arterial system, has been satisfactorily disproved by Dr. Stillé, who adduces ample evidence in proof of his conclusions"—and then adds, "The results of my own investigations are almost entirely confirmatory of Dr. Stillé's inferences."

Dr. Stillé's contributions to the journals will be principally found in the *American Journal of Medical Sciences*, between the years 1848 and 1855, inclusive. All of them give evidence of ability. They are exceedingly well written, also, and many of them may be read with interest and instruction even now. For specimens of his critical powers, style and mode of treating his subject, I may refer to his review of Dr. Addison's* *Experimental and Practical Researches*, and to his notices of Chomel's† *Elements of General Pathology*, and of Dr. Stokes's‡ *Treatise on the Diseases of the Heart and the Aorta*.

His paper on "The Psychical Effects of Ether," published in the *Philadelphia Medical Examiner*, for December, 1854, is well deserving of notice, also, as a valuable contribution to our knowledge upon a question of much interest. The subject is carefully and candidly discussed, and the conclusions arrived at may be fairly considered to be established.

The treatise on Medical Jurisprudence was, as previously stated, the joint production of Mr. Wharton and himself. The share assigned to Dr. Stillé in its composition, consisted of the 2d, 3d, 4th, and 5th books, on the Fœtus and New-born Child, on Sexual Relations, on Identity, and on the Causes of Death. Of the manner in which this portion of the work was executed, I only reiterate the unanimous sentiment

* October, 1849.

† April, 1849.

‡ July, 1854.

of the profession, so far at least as it has been expressed in the numerous reviews that have been written upon it, in saying that it is considered by all to be a most valuable addition to our medical literature. It certainly occupies a position in advance of all previous works upon the same subject, for much of its information, owing to its being gathered from sources almost entirely unexplored before, is positively novel. Almost every page in it testifies, by its numerous references, to the extended research of the writer in these exotic regions.

The most impressive lesson which the life of Dr. Moreton Stillé inculcates and exemplifies, is the importance of the early formation of good habits. By his exemplary conduct, untiring industry, and the singleness of purpose with which he devoted himself to his studies, when young, he not only strengthened his intellect, and furnished his mind with materials for future thought and comparison; but, what was of even more moment, he formed those habits of moral and mental discipline, which were their own best rewards in after-life, and without which no man was ever yet eminent in his profession.

Of his writings, the results in every instance of previous study and preparation, enough has been said already. When all their varied and solid excellencies are considered, however, his premature death cannot but be regarded as a great misfortune to the cause of our medical literature. The rich promises of his youth were only in part fulfilled by the publication of what he left us. Had a longer summer been allowed him more perfectly to ripen his faculties, his final position would have been a most distinguished one. His thorough mastery and facility of expression, his large knowledge and honorable desire for distinction, were the very qualifications necessary to place and establish him in the position he had determined to reach. If we add to these, that none of the common obstructions to such a pursuit existed in his case, that his means were ample, and the claims of professional business upon his time but slight, the assumption will appear even more probable.

Brief as his life was, he lived not in vain. Within the

circle of his peaceful years, all was gentleness, industry, and devotion to duty. Every step was a step of power, and higher culture, and more perfect attainment. Who can estimate the moral uses, the determining influence of such a character? Like the gentle rain from heaven, it sheds its benign blessings on all around it, and the seeds which it nourishes contain within themselves the germs of harvests that shall bloom, here and in the world to come, forever.

SAMUEL L. HOLLINGSWORTH

THEODRIC ROMEYN BECK.

1791—1855.

THEODRIC ROMEYN BECK was born at Schenectady, in the State of New York, on the 11th day of August, 1791. The family, as stated in the memoir of John B. Beck, were of English origin, but so long settled at Schenectady that their descendants, by association and intermarriage, became identified with the Dutch population.

The rudiments of Dr. Beck's education were acquired at the grammar school of his native city, under the more immediate supervision of his maternal grandfather, the Rev. Derick Romeyn, D.D. He entered Union College, at Schenectady, in 1803, and was graduated in 1807, when only sixteen years old. Immediately after this he went to Albany, and was admitted to the office of Dr. Low and Dr. McClelland.

His medical education was completed, however, in the city of New York, under the personal instructions of Dr. David Hosack. At the same time, also, he attended the lectures at the College of Physicians and Surgeons in that city; and in 1811 he received the degree of Doctor in Medicine, on which occasion he presented, as the subject of his inaugural thesis, a paper on "Insanity"—the first fruits of the study of that subject which afterwards engaged so large a share of his attention, and upon which he expended such stores of learning, and exhibited such powers of research. The thesis was published in a pamphlet form, containing thirty-four pages, and received from various quarters highly flattering notices.

On his return from New York, he commenced at once the

practice of medicine and surgery at Albany, and the same year he was appointed physician to the Almshouse. On resigning this office, he presented a memorial to the supervisors on the subject of workhouses, the practical wisdom of which daily experience proves at this time.

Dr. Beck was married in 1814, at Caldwell, Warren County, New York, to Harriet, daughter of James Caldwell.

In the year 1815, at the age of twenty-four, he received the appointment of Professor of the Institutes of Medicine, and of Lecturer on Medical Jurisprudence, in the College of Physicians and Surgeons for the Western District, established under the auspices of the Regents, at Fairfield, in Herkimer County, New York; an institution then in the third year of its existence. Notwithstanding this appointment, which required his absence from home only a small portion of the year, he continued in the practice of his profession at Albany.

At the opening of the term in 1824, Dr. Beck delivered an introductory lecture on the "Advantages of Country Medical Schools," which was published by request of the class. The subject had been suggested by a remark made in an introductory lecture by one of the professors in New York, disparaging to country schools, and which had found its way into some of the New York prints, to which this discourse was a severe, but dignified and dispassionate reply.

Already, in 1817, Dr. Beck had withdrawn entirely from the practice of medicine, having in this year accepted the place of Principal in the Albany Academy.

His success in his profession had been quite equal to his expectations, and with less devotion to science, or with less care for his patients, he might have continued in practice. But it was soon manifest, both to himself and to his friends, that he could not long bestow equal attention upon both. He was unwilling to assume the responsibilities of a physician without devoting to each case that exact amount of careful investigation which his high standard of fitness demanded. Every new feature in disease provoked, in a mind trained to accuracy and observation, new solitudes, new doubts, and

claimed new and more thorough examinations. Added to this, the scenes of suffering which he was compelled to witness wore gradually upon a frame naturally sensitive, and his health began visibly to decline.

At first, one must naturally regret that a mind so well stored, and so eminently qualified, in many respects, to minister successfully to the sick, should have been diverted thus prematurely from its original purpose. It would be difficult to measure the amount of good which, as a practitioner of medicine, he might have accomplished; how much individual suffering such talents might have alleviated, and how many valuable lives such attainments might have saved. This is a loss which the citizens of his adopted town, and of the country adjacent, have chiefly sustained, and which they must estimate. It is a question to them, whether he made himself as useful as a teacher as he might have been as a physician; but I believe they will be slow to find fault with his choice, when they have carefully figured up the account, and have balanced the reckoning. In fact, I think that in the fame alone which his illustrious name has given to their city, they must find an adequate apology and compensation for all his apparent neglect of their physical sufferings.

But this would be indeed only a narrow view of the question upon which the young, and, I have no doubt, conscientious Beck, assumed thus early the right to decide for himself. Although Dr. Beck formally, at this time, relinquished the practice of medicine, and never again resumed it, yet his interest in the science did not cease; but to the improvement and perfection of some one or another of its departments, the balance of his life was, in a great measure, devoted, and especially to such portions as were of general or of universal interest. He seemed, in fact, to have called in his attention from a narrow range of objects, only that he might fasten it again upon a much wider. He withdrew himself from the almshouses and the jails, in which the unfortunate maniacs were treated rather as criminals than as proper objects of sympathy and of medical care, that he might, in the retirement of his study,

within which he had accumulated nearly all the experience of the world, devise the more unerringly the means of unfettering their intellects and their limbs, then so cruelly chained.

In a letter to his uncle, Dr. Romeyn, then in Europe, dated June 30, 1814, he says: "I have begun to look upon medicine in a very different manner from what I formerly did. Although delighted with the study, yet I dislike the practice, and had not acquired sufficiently comprehensive views of its value and great importance as an object of research. I now find it a subject worthy of my mind, and for some time past I have brought all my energies to its examination."

From this remarkable passage, in which we have definitely the plan of his future life, we learn also what enlarged and intelligent views he entertained of the value of true medical science.

In 1829, Dr. Beck was appointed President of the New York State Medical Society, and he was re-elected the two succeeding years—in itself a sufficient testimony of the esteem in which he was held by his fellow-members.

His first annual address was devoted mainly to the subject of "Medical Evidence," which he regarded as embracing not only the interests of the profession, but of the community generally. In this address, he urges the propriety of appointing in certain counties, districts, or parts of the State, medical men, who shall be especially charged with the duty of making the examinations upon the cadaver, in order that by experience and study they may become better fitted for the performance of this important duty. In all cases, he believed the medical witness ought to be permitted to present a "written report" of his examination, and not be required to give it verbally and without sufficient preparation. Nor could Dr. Beck see any good reason why, if such services are important to the community in promoting the proper administration of justice, the medical men who render them are not entitled to receive an adequate compensation. "There is not," he says, "an individual attending on any of our courts, who is not paid for

his time and services, with the exception of such as are engaged in these investigations."

In his second annual address, he calls the attention of the society to the rapid progress of the science of medicine, especially in its growing distrust of mere theories, and in its devotion to pathology, anatomy, chemistry, materia medica, and the collateral branches. In defence of those who pursue the study of anatomy, he utters the following just sentiment: "All will grant their pursuit would not have been selected except from a high sense of duty. It requires some lofty incitement, some moral courage, to be thus employed. The mysterious change which death induces is alone sufficient to startle the most buoyant spirit; but with this, the pathologist must familiarize himself. He proceeds to his high office at the risk of health, often, indeed, of existence."

As a theme for his last annual discourse, Dr. Beck selected the subject of small-pox, as one of "permanent and abiding interest, not only to us as medical men, but to the whole community, indeed to the whole human race."

This paper consists mainly of a rapid history of the origin and progress of this terrible scourge, and of the value and necessity of thorough vaccination, with a view to its ultimate extinction.

Dr. Beck continued to feel an interest in, and to cultivate laboriously the science of medicine until a late period of his life. Selecting always those themes for his discourses which were of the largest interest to the largest number, he was able to discuss them in a manner which indicated an intimate acquaintance with all their relations and bearings. His suggestions are constantly such as might become a physician, a philanthropist, and statesman; and that they were not Utopian is proved by the fact that very many of them, either in their original forms, or only slightly modified, have been adopted as measures of state policy and general hygiene, or, if not adopted, they still continue to commend themselves to the intelligence of enlightened men everywhere, and physicians still continue to reiterate his sentiments, and to urge their

adoption upon those who have the care of the public interests.

I cannot omit to indicate, as worthy of especial notice, the humble, Christian-like deference with which he recognizes the hand of a kind Providence in all those discoveries and improvements in medicine, resulting in the amelioration of the condition of our race, of which our profession has been so long the chosen and honored medium.

In 1826, Dr. Beck was made Professor of Medical Jurisprudence, at Fairfield Medical College, instead of Lecturer; and in 1836, he was transferred from the chair of Practice to that of *Materia Medica*, in accordance with his own request. These two chairs he continued to occupy until the abandonment of the College in 1840.

Medical schools had been established both at Albany and Geneva, under new and favorable auspices, each having received liberal endowments from the State; and although the College at Fairfield still retained the confidence of the profession to such a degree that in its last catalogue its pupils numbered one hundred and fourteen, and its graduates thirty-three, yet as it was apparent that the wants of the community did not require three colleges situated so near each other, and as both Albany and Geneva had the advantage in their relative size and accessibility, it was determined by the several professors to discontinue the lectures at Fairfield.

At this time, the Faculty consisted of Westel Willoughby, John Delamater, James Hadley, James McNaughton, T. Romeyn Beck, and myself, as their newly appointed Professor in the chair of Surgery, vacated by the resignation of Reuben D. Mussey.

Very few changes had occurred in the school since its first organization. Lyman Spaulding, the first Professor of Anatomy and Surgery, had died; Joseph White and Delos White, respectively Professors of Surgery and of Anatomy, had resigned, and also Dr. Mussey, my immediate predecessor. With these exceptions the Faculty remained as in 1815.

From the rude walls of this College, built upon cold and in-

hospitable hills, have gone out more than three thousand pupils, and nearly six hundred graduates; of whom nineteen have held, or do now hold, professorships in colleges, eight are in the United States service as surgeons, and very many more have risen to distinction in the practice of medicine and surgery.

Immediately on resigning his place at Fairfield, Dr. Beck was elected to the chair of *Materia Medica* in the Albany Medical College; the chair of Medical Jurisprudence, to which he would most naturally have been chosen, being already occupied by a very able teacher, Amos Dean, Esq. This professorship Dr. Beck continued to hold until 1854, when his declining health, together with an accumulation of other pressing duties, induced him to resign his place as an active officer, having now taught medicine in some of its departments for thirty-nine years, and the trustees then conferred upon him the honorary distinction of Emeritus Professor.

It has been mentioned that in 1817, Dr. Beck was made principal of the Albany Academy; and in a letter to his uncle, Dr. Romeyn, dated August 1, 1817, shortly before the appointment, he writes as follows: "This I know, that by zeal and attention on the part of the instructors, it can be made an eminent and useful institution." . . . "I pray you to believe that the mention of my name as a candidate, was unsolicited and very unexpected. It is a spontaneous offer, and as such I shall always look on it as a testimony of no mean value." The citizens of Albany and his numerous pupils, now scattered throughout the United States, can bear witness how great was his zeal in behalf of that institution, and how well he fulfilled his promise.

The building occupied as the Academy, was erected for this purpose by the city authorities; it is large, commodious and distinguished, even among the numerous public edifices which adorn this capital, for its fine architectural proportions. Each department is supplied with able teachers, and with ample means for illustration, and during the more than thirty years

of his administration, it sustained a reputation second to no similar institution in the State.

I find in one of the Albany city papers, dated some years back, pencil sketches of a few of its most prominent citizens, among whom is mentioned Dr. Beck. The writer, who is not ignorant of his many other public services, and of his reputation abroad, thus speaks of his connection with the Academy :

"The Albany Academy is an institution which has furnished the community with more mind than any other academy in this country; a distinction that is doubtless due to the admirable discipline and well-stored brain which Dr. Beck brought with him into the institution, in 1817."

In 1848, Dr. Beck resigned his place as principal of the Academy, and, on the death of James Stevenson, Esq., he succeeded him as President of the Board of Trustees.

The "Society for the Promotion of Agriculture, Arts, and Manufactures," was incorporated by the Legislature on the 12th of March, 1793, with Chancellor Livingston as its president. The existence of the corporation was limited by its charter to the first day of May, 1804. On the 2d day of April, 1804, the Legislature virtually renewed the charter, making it perpetual, changing the name of the corporation to that of "The Society for the Promotion of Useful Arts," and Chancellor Livingston was appointed the president of the new corporation. Dr. Beck, at this time only twenty-one years old, was admitted a member of this society on the 5th day of February, 1812. Among its officers, in addition to its distinguished president, already named, were Simeon De Witt, John Taylor, David Hosack, Stephen Van Rensselaer, De Witt Clinton, Edmund C. Genet, and others prominent in the history of the State of New York. At its second meeting after his election, he was made the chairman of a standing committee of five, appointed "for the purpose of collecting and arranging such minerals as our State affords." And on the 1st of April, 1812, less than two months after his admission, he was appointed to deliver the annual address at the following session of the society. This duty he performed on the 8d day of

February, 1818, in the old Senate Chamber. The purpose of his discourse was, as he remarks, to "exhibit at one view, the mineral riches of the United States, with their various application to the arts, and to demonstrate the practicability of the increase of different manufactures, whose materials are derived from this source."

This was eminently the field for Dr. Beck's peculiar talent. It was new, and everything had to be learned from the beginning; a host of persons and authorities had to be consulted, and the whole to be carefully digested, analyzed, and applied. The result could not have disappointed those who were familiar with his habits; but to one who had known him less, or who was at all acquainted with the difficulties which he was compelled to encounter in the little that was then known of the mineral resources of this country, the result seems astonishing; and to that elaborate and timely paper, the American manufacturer is, to-day, in no small degree indebted for his wealth and prosperity. It was the lens which first brought the scattered rays of light upon the subject to a focus, and which now melts the ores in a thousand furnaces. If, as Dr. Beck asserts, American mineralogy was then in its infancy, he was the first to urge upon it a confidence in itself, and to demonstrate to others its unsuspected capacities; and it is through such early guidance and assistance that it has so rapidly grown to complete manhood, no less than to the "persevering industry, the unconquerable enterprise, and the extraordinary ingenuity of our citizens."

In 1819, Dr. Beck read, before the same society, a "Memoir on Alum," the object of which was to present a view of one of the most important of the chemical arts. In preparing it, "I consulted," says Dr. Beck, "every work relating to the subject within my reach."

"Had the work, conducted some years ago by Professor Cooper, of Philadelphia, under the title of the Emporium of Arts, been continued, this attempt would doubtless have been useless, as the subject under consideration was one of those which he proposed to notice. I venture, though with unequal

steps, to examine the history, progress, and present state of the manufacture of alum, with a hope that my investigations may prove useful to some who are unable to consult systematical works, and above all, that they may direct the attention of our citizens to the means which they possess, within their own reach, of converting useless mineral products into rich sources of individual and national profit."

This, together with the paper first mentioned, is published in the Transactions of the Society, before which they were delivered.

The Albany Lyceum of Natural History was incorporated by the Legislature on the 23d day of April, 1823. Stephen Van Rensselaer was, by the charter, appointed its first president, and Dr. Beck, its first vice-president. A union between this association and the Society for the Promotion of Useful Arts, was agreed upon and carried into effect in 1824, and consummated in form by an act of the Legislature of the 27th of February, 1829, incorporating the Albany Institute, to consist of three departments: the first, that of the physical sciences and the arts, to consist of the Society for the Promotion of Useful Arts as then constituted; the second, that of natural history, to consist of the Albany Lyceum of Natural History, as then constituted; the third, for the promotion of history and general literature, to be formed for the purpose. Of the Albany Institute so constituted, dating back its foundation to the establishment of the Society for the Promotion of Agriculture, Arts, and Manufactures in 1793, and thus being, I believe, the oldest institution of this character in New-York, and one of the oldest in the country, Dr. Beck was not only one of the most active members, but it may be safely said, without doing injustice to many others who have been connected with it, that he did more to keep up its organization, to enlarge its library and collections, and generally to advance its interests, than any other person connected with it. Its proceedings, as well as its published Transactions, bear evidence to the fidelity and zeal with which he labored for its prosperity. At the time of his death, and for many

years before, he was its president. In 1835, Dr. Beck, by appointment, delivered before the Institute a eulogium on the life and services of Simeon De Witt, Surveyor-General of the State, Chancellor of the University, and also, at the time of his death, one of the vice-presidents of the society. After a sketch of the life of this highly esteemed and venerable man, remarkable for the simplicity and clearness of the style and narrative, adverting to the loss which the Institute had sustained in the death of other members, he closes in language which has a peculiar appropriateness in this biographical memoir.

"Happy," says he, "if, when our account is made up, we shall be found each in his appropriate sphere, like our honored fellow-members, to have done some service to the community or the State. Then, whether in the morning of life, or at its fervid bustling noonday, or in the declining hour, we depart, our memories will be cherished, and our names implore the passing tribute of a sigh."

One of the originators of the plan for the Geological Survey of the State of New York, Dr. Beck became one of its most ardent supporters, and under the successive governors he was intrusted with much of the supervision of the work.

The Legislature of 1850 confided to the Secretary of State, and to the Secretary of the Board of Regents, the supervision of the publication of the remainder of the Natural History of the State. The geological survey having been protracted much beyond the period originally contemplated, and various claims existing in reference to it, the two officers named were required by law to report to the next Legislature what those claims were, and what contracts existed between the State and individuals for such of the work as remained to be completed. They were also required to report a plan for the final completion of the survey, and to submit estimates of the cost of such completion. Dr. Beck's acquaintance with the history of this work, and all the matters connected with it, was perhaps more complete than that of any other person in the State; and this fact led to the selection of the Secretary

of the Regents, a post which he then filled, as one of the commissioners. Whether we look at the interests of the State or those of science, no better choice could have been made.

The reports of the commissioners to the Legislature, show the good effects of the investigation made by them; and judging from the order and system which the affair soon assumed under their hands, and the comparative economy which attended their expenditures and plans, it is hazarding little to say that, had a permanent commission of this character been charged with the care of the survey from its outset, the work would have been more systematically pursued, and at an expense greatly less than that which the State has incurred.

Since 1841 he occupied the office of Secretary of the Board of Regents, a position of great honor and trust.

The Regents have a supervisory charge of the educational interests of the State, and are required to report annually the condition of all the colleges and academies under their care. His reports made during the period of his incumbency are not only voluminous, but they are equally models of accuracy and of compactness.

But the supervision of colleges and of academies does by no means limit the powers and responsibilities of the Regents. To them is intrusted the care of the State Library, and of the State Cabinet of Natural History, with also the management of much of the foreign correspondence, and all of the literary or scientific international exchanges; most of which various duties devolved officially upon Dr. Beck.

To his earnest devotion and eminent qualifications the State is therefore indebted for its large and judiciously selected library, and especially for its unrivalled collection of works on the history of this country and State.

In the language of Dr. E. H. Vandeusen, from whose brief but elegant biography, written for the New York Journal of Insanity, I am indebted for several of the facts contained in this memoir:

“Dr. Beck has witnessed the adoption, in this State, of a public system of education, elementary and collegiate, alike

thorough and successful; and as the crowning effort in the field of his severest, yet most congenial labor, a State Library, which, for completeness of organization and beauty of arrangement, stands unrivalled, and for which, it may be remarked, the State of New York is almost entirely indebted to his extended and complete knowledge of the history of literature and science, in which he had no equal in this country, if, indeed, anywhere."

Many years ago Dr. Beck became interested in the subject of a State Museum. In fact, while connected with the City Lyceum, established in the Albany Academy, he was industriously accumulating and depositing everything of which he could possess himself, relating to history, or to natural science, a passion which, it is well known, did not cease or abate when his admission into the Board of Regents gave him a wider field for its exercise. To the State Library and the State Cabinet hereafter his time and talents were in no small degree directed; and such was his zeal in behalf of these institutions that he did not hesitate, at times when the illiberal policy of individual members of the Legislature hazarded the success of necessary appropriations, to give his personal pledge that the moneys should be judiciously applied, and by becoming, as it were, the indorser of the government, he secured the recognition of the claims of these interests, and obtained the necessary supplies.

On the arrival of M. Vattemare in this country, Dr. Beck immediately saw the value of such a system of international exchange as was proposed, and became at once one of its warmest advocates; nor did he ever cease to urge upon the successive legislatures of New York the continuance of the system; and even upon his death-bed he entreated, as a personal favor, that his friends would not forget the claims of this subject, in which he had always felt so deep an interest.

In a letter lately received, M. Vattemare writes: "The death of Dr. Beck deprives me of the best and most faithful friend I ever had, as well as of the most enlightened and active co-operator in the noble cause to which my life is de-

voted. . . . I thought that with my friend all was gone; for the recollection of his solicitude for the system of exchange, as well as his paternal anxiety for the State Library—that glorious monument of his patriotism and high knowledge—revived my courage, and with it the hope that those kind friends I have yet among the Regents of the University, and the recollection of the friendship of Dr. Beck for me, and his association in my labors, would secure the continuation of their good will.”

Outside of his own peculiar sphere of duties, no object of public interest was undertaken without finding in him a warm supporter. When the project of a University in the city of Albany was started, intended to supply the scientific and literary wants of the whole United States, Dr. Beck, while seeing clearly all the difficulties and discouragements attending such a scheme, gave it his full countenance and encouragement. Of the American Association of Science he was an active member, and rendered to it many services.

In obedience to those promptings of humanity which seem in a great measure to have determined his course in life—laboring always most zealously for those who were least able to appreciate his services, or to recognize them—he read before the New York State Society, in 1837, a paper on the statistics of the deaf and dumb, which had the effect to direct the attention of the public and of the legislators more fully to the condition and necessities of this unfortunate class, and the results of which may be seen in the establishment in the city of New York of a school for deaf mutes, unrivalled in the excellence of its system and in the perfection of its details.

By the act of its incorporation, in April, 1842, Dr. Beck was made one of the Board of Managers of the New York State Lunatic Asylum at Utica; and he was reappointed by the Governor and Senate at the expiration of each successive triennial period. Upon the death of Mr. Munson, in 1854, he, although a non-resident member, was unanimously elected President of the Board. This important institution, established and endowed by the State upon a scale

of almost unparalleled munificence, is no doubt indebted largely to Dr. Beck for his wise counsels and efficient personal aid, which he at all times freely contributed.

Dr. Beck was also an occasional contributor to the pages of the *American Journal of Insanity*, published at Utica, under the editorial management of Dr. Brigham, the former principal, and when, upon the death of that gentleman, in 1850, the management of the Journal fell into the hands of the Board, Dr. Beck was chosen its editor, a place which he continued to hold "until the close of the last volume, when advancing years and more imperative duties compelled him to relinquish his editorial connection."

Of the chief labor of Dr. Beck's life, and of that which has made his name illustrious wherever science and literature are cultivated, it still remains to speak. I allude to his work on *Medical Jurisprudence*. From how early a period in his life the subject of this work occupied his attention we may infer from the following brief extracts from letters written to his uncle, the Rev. J. B. Romeyn. The first is dated in 1813:

"Permit me to press upon you the obtaining of one or the other of the French authors on legal medicine. It has long been a favorite idea with me to prepare a work on that subject, and should I be enabled to procure Foderé or Mahon, my design may be completed."

The second is dated June 30, 1814, and was addressed to his uncle, at Lisbon, Portugal:

"As the communication is now open between Great Britain and France, you will doubtless be enabled to procure the books I wished. Dulau advertised them some years since." . . .

The treatise alluded to appeared in 1823, in two volumes, octavo; and not only attracted great attention at the time, but has ever since continued to be a standard work on the subject. The science of medical jurisprudence is one of great interest and importance. It treats of all those questions in which the testimony of a medical man may be required before courts of justice, and from the nature of

many of the questions, it is obvious that their discussion requires the widest range of medical and scientific knowledge. Although deeply studied in Italy, France, and Germany, this science had scarcely attracted any attention, either in this country or in England, previous to the publication of the work of Dr. Beck. To him is certainly due the high credit, not merely of rousing public attention to an important and neglected subject, but also of presenting a work upon it which will probably never be entirely superseded. In foreign countries, its merits have been duly appreciated and magnanimously acknowledged.

In 1825, the work was republished at London, with notes by Dr. William Dunlop, and it passed altogether through ten editions, including the four English editions, during the author's life. Since his death, a new and enlarged edition has been issued under the supervision of Dr. C. R. Gilman, of New York, assisted by an able corps of collaborators. In 1828, the work was translated into German, at Weimar, and has been favorably received in various parts of the continent of Europe. Considered all in all, it is unquestionably the most able, learned, and comprehensive treatise on Medical Jurisprudence in any language, and may, therefore, justly be regarded as the crowning glory of Dr. Beck's literary and scientific life.

Although the two volumes originally comprised more than two thousand pages octavo, yet to each successive American edition he did not fail to add largely from his apparently inexhaustible stores of knowledge and research. Nor even here did his labors cease, but he continued to contribute, almost to the period of his death, to one or more of the medical or scientific journals of the country, such additional facts or discoveries as from time to time came to his knowledge. In the "American Journal of the Medical Sciences," edited by Dr. Hays, may be found many of his most valuable papers.

There is, perhaps, no testimony more pertinent, as to the rank occupied by Dr. Beck in the literary and scientific world, than the large number of societies, both abroad and at home, which conferred upon him either honorary or active

memberships. Among others less known, we may mention the New York Historical Society, of which he was elected a member in 1818; Physico-Medical Society, New York, 1818; Antiquarian Society, Massachusetts, 1816; Academy of Natural Sciences, Philadelphia, 1816; Lyceum of Natural History, New York, 1817; American Geological Society, New Haven, 1819; Natural Historical Society, Montreal, 1821; Honorary Member of Medical Society, London, 1824; Medical Society, Quebec, 1824; Corresponding Member, Linnæan Society, Paris, 1826; Honorary Member, Medical Society, Connecticut, 1826; Society of Emulation, Charleston, South Carolina, 1827; Medical Society of New Hampshire, 1828; Associate of the College of Physicians, Philadelphia, 1829; Honorary Member, Royal Medical Society of Edinburgh, 1832; of Meteorological Society, London, 1838; of American Philosophical Society, Philadelphia, 1839; of Medical Society of Rhode Island, 1839; National Institution for the Promotion of Science, Washington, 1840; Historical Society of Pennsylvania, 1841; American Ethnological Society, 1842; Northern Academy of Arts and Sciences, Dartmouth, 1845; Corresponding Fellow of New York Academy of Medicine, 1847; Royal Society of Northern Antiquaries, Copenhagen, 1848; Historical Society, Vermont, 1850; American Statistical Society, Boston, 1851; State Historical Society, Wisconsin, 1854. The degree of LL.D. was conferred upon him by the Mercersburg College, Pennsylvania, and by Rutgers College, New Jersey.

Dr. Beck enjoyed during his long life almost uninterrupted health, the result, probably, of a good natural constitution, and of regular, temperate, and active habits, so far at least as his literary pursuits would permit.

In the early part of January, 1854, he suffered first from a severe attack of indigestion. In February, 1855, he was again taken ill in a similar manner; and these attacks were renewed hereafter, with more and more frequency, accompanied with dyspnœa, and with such other symptoms as seemed to indicate disease of the heart. His emaciation

became extreme; and finally, after severe and protracted suffering, which he bore with exemplary patience and Christian resignation, he died on the 19th of November, 1855, at the age of sixty-four years and three months.

To the inquiry, so natural to one who reflects upon the life and labors of Dr. Beck, "How has any man been able to accomplish so much in a single life?" The reply is,—it was the result of system, indomitable perseverance, of ardent devotion, and honesty of purpose, united to excellent talents. But no one quality so much contributed to his extraordinary attainments as that methodical improvement of time which he adopted from the first and retained to almost the last hours of his life. Every duty had its time and place, with which no other duties were allowed to interfere. A given portion of each day was assigned to a particular subject, and this arrangement was not to be interfered with. The morning study was never postponed to the evening, nor relaxation nor miscellaneous reading permitted until the allotted tasks were respectively dispatched. Having determined also upon any great purpose, it was never relinquished until it was accomplished. With him there was no vacillation or uncertainty of design; and at his death nothing seems to have been left unfinished, but that one labor which he had undertaken too late for its full completion,—a memoir of his early friend and counsellor, the lamented De Witt Clinton; a work for which his long and intimate acquaintance, his sympathy of feelings and tastes, with his rare literary attainments, eminently qualified him.

In his domestic relations, Dr. Beck was kind and affectionate. I hesitate, even in a biographical memoir, to invade the sanctity of private life; but I must yield to an impulse which instructs me to value the example of a pure and unsullied character in its relations to home and to the social circle.

To his wife, who died in 1823, at the early age of thirty-one years, a woman of rare accomplishments and of refined sentiments, he was devotedly attached; and I am told that the greater part of his work on Medical Jurisprudence was written while watching at her bedside during her last and

painfully protracted illness,—a most touching memorial to her virtues and to the kindness of his own heart.

Of his brothers, he was the eldest; and, although accustomed always to exercise over them a kind of paternal care, he was singularly attached to them; and when, one after another, they died, until he alone was left, he seemed to suffer the most poignant grief; especially did the death of his last and youngest brother—the late Lewis C. Beck,—with whom his associations and pursuits were the most constant, fall heavily upon him.

His mother—that venerated woman, who herself had watched over his infancy, and guided him carefully through his youth, up to manhood—found under his roof a welcome shelter in her declining years, where at all times her wants were more than supplied, and her counsels and precepts were reverentially respected. Brought up under her father's care, her education was solid and judicious, and, until the last three or four years of her life, when her mind gave way, she preserved her interest in all literary pursuits. She lived to see all her children attain eminence and respectability, and died at last at the advanced age of eighty-five years.

Dr. Beck had no sons. His two daughters, Catharine, wife of Pierre Van Cortlandt, Esq., of Westchester, and Helen, wife of Hon. William Parmelee, of Albany, still live to attest his inestimable worth and to exemplify his virtues.

In the presence of strangers, Dr. Beck was somewhat reserved, and not unfrequently seemed unsocial; but, with his more intimate acquaintance, he was remarkably free, affable, and unrestrained; and through all his familiar social conversations there was a rich vein of humor mingling with the profounder currents of thought and discussion.

His knowledge of books was not confined to scientific treatises. He read most of the standard works in history, romance, poetry, and in all departments of light literature. He read rapidly, and soon possessed himself of the meaning or value of any author; a faculty which, united to a retentive memory, made him almost the final umpire whenever ques-

tions of text or authority arose. In the language of one who knew him intimately, and who had been a colaborer with him in the establishment of the State Library, "His knowledge of what I would call the science of literature, I have never seen equalled."

He was liberal to the poor, and kind to all. Not even the brutes escaped his sympathy. Cruelty to animals excited in him always the most intense disapprobation.

His belief in the divine revelation, and in its doctrines, as held by the great body of Protestant Christians, was firm, decided, and often expressed; and he could never tolerate any attempts on the part of any person to impugn or to throw discredit upon them.

FRANK H. HAMILTON.

JOHN COLLINS WARREN.

1778—1856.

JOHN COLLINS WARREN, the son of Dr. John Warren, was born at Boston, on the 1st of August, 1778.

In 1786, being then eight years old, he entered the public Latin School. At this period of his life, he is described by those whose recollections go so far back, as a boy of great sedateness, remarkable for his scrupulous neatness of person, and for his love of order, as shown in his room, his library, and his clothes. He was also distinguished as a child for a high tone of moral feeling, but was cold, reserved, and silent, even at that age. Notwithstanding this external coldness, however, he was naturally of a warm, ardent, and even impetuous temperament. His disposition was affectionate, and his mother often mentioned the devoted and patient attention which he displayed in watching by her sick-bed, when he was nine years of age. He had a strong natural taste for music, and could easily catch a tune upon once hearing it. As an illustration of this, it may be mentioned, that though in after-life he never indulged the taste, yet he states in his diary that he perfectly retains, after the lapse of fifty years, the air of a Greek song, which he learned from one of Napoleon's officers, with whom he boarded in Paris.

At the first distribution of the Franklin medals, at the Latin School, his name stood at the head of the list. He left school for Harvard College in 1798. He was then at the head of his class, and delivered a valedictory address, on the 13th of July, in this year, in laudation of public school education, before the "venerable fathers of the town."

This address, a copy of which is extant, partly in his handwriting, consists of grave advice to those who were to remain in the school to avail themselves to the utmost of the advantages which they enjoyed—advantages which were greater because shared equally between the poor and the rich, so that a feeling of cowardly depression was not cultivated in the former, or undue consciousness of superiority in the latter.

Two of his surviving classmates, the Rev. Dr. Jenks, of Boston, and Judge White, of Salem, testify to his honorable standing in college, both as a scholar and a young gentleman. They state that he always held in view the rank obtained by his uncle, General Joseph Warren, as well as the high standing his father had obtained, and his ambition was continually stimulated by these examples.

He was graduated in 1797. It was his father's wish that he should not enter a profession which he had found so laborious, and in many respects so full of care and anxiety as his own; but that he should adopt the more immediately lucrative employment of a merchant. John does not appear, at that time, to have had any decided bias for his father's profession, and he spent the first year after he was graduated in studying the French language, as a useful preparation for whatever occupation he might adopt.

The troubled state of Europe had, at that time, deranged mercantile affairs so seriously that, upon inquiry, it was found impossible to obtain such a situation in a counting-room as his father thought entirely suitable, and he was permitted, therefore, to indulge the preference which he felt for a profession. He commenced the study of medicine, and remained one year with his father. That his taste for this pursuit was not naturally very strong, seems to be shown by his speaking in his letters of this period as a year lost in the "pretended" study of medicine.

At the end of a year, his strong desire to visit Europe, and avail himself of the advantages afforded by foreign hospitals, induced him to embark for London. He sailed on the 16th of June, 1799, two years after he had taken his Bachelor's de-

gree, and arrived in London in twenty-four days. His passage, though less rapid than those made in these days, had more objects of interest. Despite of the assistance which France had rendered America, difficulties had arisen, and a war—which, by the testimony even of a Frenchman, Las Cases, was brought on by the vexations and insolent conduct of the French—ensued.

It was not possible, at that exciting period of our history, for the nephew of General Warren, and the son of one of the most ardent and unselfish patriots who ever lived, to behold public events with indifference. He had previously taken a deep interest in politics, and on the breaking out of the French war, took an active part in military affairs, and in the organization of companies. This interest in military matters, and his connection with a company, latterly as surgeon, continued through life.

He describes his employments on board ship as of a warlike character. He and the other passengers were appointed to the charge of the great guns, and they soon became so expert in the management of these heavy pieces, that, he says, the oldest seaman could not outdo them. The captain inclining to prove their alacrity, once gave the alarm at midnight, when they were all buried in sound sleep. "In five minutes we were all at our stations, and had every gun prepared for action." They had many real alarms, and were forced to pass many nights in their clothes. Friends and enemies were almost equally disagreeable to meet. They were driven within pistol-shot of the French coast. "After chasing a privateer, quarrelling furiously with a British cruiser, and receiving very polite treatment from others, we landed at Deal, on the 10th July."

Having arrived at London, seen the wonders, delivered his letters, and received the consequences thereof, he commenced at once the attendance of the hospitals. "There are," he says, "two kinds of students in the hospitals; the one called dressers, and the other walkers. The first have the advan-

tage of practising on all the simple surgical cases, and dressing all wounds themselves; the others merely see what is done. Of course the former have vastly the greatest opportunities, but the expenses are likewise double, as the walker pays £25, the dresser £50. Though I do not like to pay so much money for one object, I believe I shall enter as dresser; for, as I intend to become a surgeon, I think the acquiring a facility and standing in manual operations of the utmost importance."

Our American student was fortunate in having opportunity to enjoy the instruction of the immediate pupils of the celebrated John Hunter, of Guy's Hospital. From them he acquired the taste and the facility of making anatomical preparations, which he always pursued with interest, and gradually formed the collection which he gave to the Massachusetts Medical College, and which is designated as the Warren Museum.

He engaged lodgings near the hospitals, comfortably situated, three stories from the earth. His chambers were of sufficient size to require two steps from one side to the other. The "master" with whom he engaged was at first absent from London, and he availed himself of four weeks leisure, for a tour in the Isle of Wight, and a large part of the south of England. On the surgeon's return, in August, he entered his name, and became senior dresser to William Cooper, "one of the best of men and most eminent surgeons in London." Astley Cooper was afterwards connected with his uncle, and Dr. Warren always took delight in speaking of him as his "master," a word that has become nearly obsolete with us.

Mr. Warren speaks in the highest terms of Astley also. Though both were of high standing, their opinions, he states, were, in many respects, diametrically opposite. Thus, William Cooper would say that the opening of an abscess was effected much more kindly and safely by nature, than it could be done by art. Astley maintained that an early incision, by relieving the tension of the parts, aided nature and saved much suffering.

Here he devoted himself one year especially to hospital practice, and to the study of Anatomy, Surgery, and Midwifery. His time was fully occupied. He went only from his room to the hospital, where he was obliged to sleep during his week to attend accidents, which came in very fast. He had from thirty to forty patients particularly under his care, at once. "I had, among others, a very fine simple fracture of the leg, which I think will do well. In fact, without the least previous notice, I am pitched into a surgeon. Obligated to do things of which I never saw a case, nor had an idea of, and I think I do very well." He writes to his mother, September 27th, 1799, "I am the luckiest dog in life. I was called away at the end of the last period to a dislocated shoulder, which I have reduced in very handsome style. Within three days of my week, I have had one fractured leg, and another that we thought was fractured at first; one fractured rib, and this dislocation, besides two or three trifling accidents. I have been exceedingly fortunate every way, and I really begin to think I shall be famous."

In September, 1800, he left London, and went by way of the lakes to Edinburgh, with the special view of studying Medicine and Chemistry, not, however, losing sight of Anatomy and Surgery. He remained in Edinburgh until June 4th, 1801, having diligently attended the lectures which closed for the season about this time. Travelling through Holland on account of the war, he reached Paris in July, and entered with M. Antoine Dubois, afterwards Baron Dubois, at the Hospice de l'Ecole de Medecine, for one year. Here he studied Anatomy, Clinical Surgery, Midwifery, Chemistry, and Botany, with Dubois, Vauquelin, Dupuytren, Chaussier, and Desfontaines. Through the aid of his banker, he obtained a place in the family of Dubois, a situation attended with very great advantages. In the family of Dubois were two of Napoleon's officers, from whom he received much attention and valuable information.

He had laid the foundation of a thorough knowledge of

chemistry in Edinburgh, by six months' attendance upon the lectures of Dr. Hope, then the best chemical teacher in Europe. In Paris, he attended the lectures of Vauquelin, whom he describes as the best chemist in France, though certainly not the best lecturer. This course was two hours a day, for seven or eight months. His attention to Anatomy and Surgery was, of course, never remitted. After the conclusion of the winter course, he attended the lectures at the Jardin des Plantes. Here were Fourcroy, whom he describes as a great orator; Cuvier, afterwards so distinguished, and Desfontaines.

Shortly before he left Paris, he received an invitation from, or by the order of Napoleon, to join the French army, which was then organizing in Italy. It would have been gladly accepted, but his father was anxious for his return, to see him established in medical practice before his own health, which was feeble, should fail, and the business be taken by others.

Dr. John C. Warren returned home in the latter part of the year 1802, and speedily began to aid his father in his practice. At that period, there were comparatively few physicians in Boston, and those of much note were of advanced age. Though well acquainted with the principles of the art of healing, he was little familiar with the details of private practice, or the proportioning doses of medicine; details which, however important to the welfare of a novice's first patients, are too apt to be left to be acquired by supposed intuition. Many cases of midwifery came under his charge. In the course of the succeeding summer, he was left with the whole practice, medical, surgical, and obstetrical. At this period, he sometimes made fifty visits a day.

The remarkable tact possessed by his father, in taking in at a glance the patient's case, has been noticed by Dr. Jackson. As some children possess in arithmetic the remarkable faculty of arriving at results, without apparently going through the previous steps, so did the elder Dr. Warren perceive, by an apparent intuition, the exact condition of his patient: he rode rapidly, almost furiously, and made very rapid visits. From his father, and from his own rule adopted very early in

life, of never wasting a moment, he undoubtedly acquired the power of doing a great deal of business in a very short time.

His attention having, as a matter of necessity, been occupied with the study of the Theory and Science of Medicine, he underwent many severe trials, both from want of his habit of prescribing, and from the unwillingness of many to confide in so young a physician. Dr. Warren did not adopt the recommendation of old Panton to Dr. Percy, in "Patronage," to provide himself with a wig; he satisfied himself with keeping his queue and white top boots, for some time after they had begun to be abandoned by the young and fashionable.

He was much more at home in the dissections, which he undertook to prepare for the lectures in Cambridge. This, however, interfered, he complains, with a more important affair which he then had on hand. In about a year after his return from Europe, he was married to the daughter of the Hon. Jonathan Mason. He went to live for a few weeks in Mr. Mason's house, then the best in Boston. In six weeks after, he removed to the house in Tremont Street, where the Pavilion now stands.

Engaged as he was in active business, he found time for other pursuits. In 1803, he became a member of a society for the study of Natural Philosophy, of which Mr. John Lowell, John Quincy Adams, Rev. Dr. Kirkland, Josiah Quincy, Dr. Jackson, William Emerson, and others, were members. He also became a joint editor of the Monthly Anthology, one of the earliest and ablest monthly periodicals in Boston. The ablest literary men, among whom was the highly gifted Buckminster, whose early death was so deeply lamented, contributed to support this work. Rev. Mr. Gardiner, William Emerson, William S. Shaw, Buckminster, Tuckerman, Dr. Jackson, and others, formed the Anthology Society. In 1806, the society took into consideration the establishment of a reading room in the town, and from this small beginning arose the Boston Athenæum. Dr. Warren at this time also formed a private medical society, with Drs. Jackson, Dixwell, Coffin, Bullard, and Howard.

The earnest zeal of Dr. John Warren for the extension of anatomical knowledge had introduced demonstrations upon the real body, instead of wax figures, at Cambridge. A medical school was soon formed there in connection with the college. It was a matter of novelty; and it is now difficult to conceive the interest and delighted attention with which a class of students, who were eager to improve in knowledge of anatomy and whom privation had taught the value of the privilege, listened during an extempore lecture, two hours long. Those who enjoyed the privilege, describe the elder Warren as very eloquent.

In October, 1805, Dr. J. C. Warren removed to No. 2 Park Street, where he continued to reside for the rest of his life, a period of more than fifty years. During this year, he took a room over the apothecary store of Mr. White, in Washington Street or Marlborough Street, as it then was. Here he gave public demonstrations in anatomy. The same was used, for many years after, for lectures upon subjects connected with medicine.

In 1806, he was chosen adjunct Professor in Anatomy and Surgery with his father. This office he held until the death of Dr. John Warren, in 1815, when he was chosen to fill his place.

Dr. John Warren, while surgeon of a military hospital in Boston, in 1780, had commenced the first course of anatomical lectures ever delivered in New England; and the following year, they were attended by the students of Harvard College. He furnished a plan for a medical school, which was adopted by the corporation. In 1783, he was chosen Professor of Anatomy and Surgery, and Dr. Benjamin Waterhouse Professor of the Theory and Practice of Physic. It being found exceedingly inconvenient to the professors, who resided in Boston, and the medical students in general, to attend the lectures in Cambridge, the plan of transferring the school to Boston was proposed, and carried through in the year 1810, though not without great opposition. In the year 1809, Dr. Warren published a paper on Organic Diseases of

the Heart, a subject which had not before received attention in this country.

In 1810, he began to make exertions, in conjunction with Dr. Jackson and other medical gentlemen of Boston, for the establishment of a hospital, for the double purpose of relieving persons too destitute to be taken care of at their own homes, and of affording an opportunity for students to acquire a practical knowledge of medicine.

The succeeding year, he united with Drs. Jackson, Gorham, Bigelow, and Channing, in the establishment and editorship of the "New England Journal of Medicine and Surgery." This Journal was conducted with great ability, and continued to flourish until the year 1828, when it was united with another, under the charge of the same editors, and took the name of the "Boston Medical and Surgical Journal."

On the death of Dr. John Warren, in 1815, Dr. Warren took the principal part of his father's business, in addition to what he had previously acquired. He was chosen Professor of Anatomy and Surgery. He also gave lectures upon Midwifery and Physiology. In this year, the Massachusetts Medical College was built, the funds for which had been obtained principally by the exertions of Dr. Jackson and Dr. Warren. It was opened the succeeding year.

But in addition to this unwearied industry, Dr. Warren possessed that temperament, that faculty of throwing himself into his subject, seeing it in the strongest light, and feeling it vividly as a matter of personal interest; that faculty, in short, in which talent and genius consists. This gave him his power as a clear and able writer, and an interesting and successful lecturer. Seeing clearly, and full of his subject, but using as few words as possible, he was lucid and intelligible.

By those who wished to depreciate his skill, but could not deny his success, it was sometimes said that he was a mere skilful operator, but destitute of the other qualities of a surgeon. They knew him only from what they saw in public, in the operating-room. The fact was widely different. He did not value himself upon his dexterity as an operator, at least if

celerity is a proof of dexterity. His motto was not *tutè, citè, et jucundè*; it was *cautiously and thoroughly*. On the occasion of a physician from a distance taking out his watch, when Dr. Warren commenced an operation at the hospital: "You may put up your watch, Dr. —," said the surgeon, "I do not operate by time."

That he was a skilful and dexterous operator there is abundant proof, but he possessed a much higher skill,—that of distinguishing disease at a glance, and treating it in the most skilful manner, both before and after an operation, if an operation was necessary, and instantaneously seeing any change for the worse. It was said some years ago, by an American physician resident in Paris, that if he was compelled to undergo a surgical operation, he would come to Boston, because he had much more confidence in the after-treatment. Other Americans felt the same. Recognizing the truth of the maxim that operations are the opprobrium of surgery, Dr. Warren never made up his mind to perform an operation, until all other probable means of cure had been fully tried. The patient, therefore, might always feel full confidence that he would not advise or perform an operation, unless it was absolutely necessary.

Having determined to operate, he prepared himself deliberately for it, by reflecting in his own mind upon the method required, writing a list of the contingencies that might occur in the course of it, and of every instrument or article of apparatus that might be called for. In important cases, he resorted to authorities, and often practised the operation upon the dead subject. Thus, every operation was with him a matter of study, greater or less, according to its importance. He took pains also to avoid everything which might interfere with the steadiness of his hand, or the delicacy of his manual tact, or that might produce mental excitement in a temperament, which, though kept under rigid control as it was, was always excitable.

He proceeded to the operation with the greatest deliberation and caution, taking care to assure himself of the nature of

every part or texture before he divided it, and to ascertain at every step that he knew exactly where he was.

The operation performed, he proceeded with equal care to the bandaging, which with him was also a science. Perhaps one of the greatest improvements which he adopted, was in the little use made of the needle and ligature in closing wounds. By the judicious use of adhesive straps and bandages, these were often dispensed with, and the unpleasant necessity avoided, of making additional painful wounds, and leaving a foreign substance to increase the irritation.

Thus it may be seen to the satisfaction of every one, that the position which he now occupied was obtained and held, in the first place, by his diligent and earnest preparation in the study of his profession, and by his availing himself to the utmost, of the very great advantages which he enjoyed abroad, and secondly, by his continued and unremitting efforts, not only to keep his ground, but to improve himself and his science. If there were any who supposed that he fell easily and naturally into his father's place, with little exertion of his own, or that he held his position without both talents of a high order, and unwearied and exclusive devotion to his profession, they were utterly ignorant of his labors.

In 1820, Dr. Warren joined the religious society of Episcopalians, which had then recently erected St. Paul's Church in Boston.

In this year, the Massachusetts General Hospital was opened. It differed from other institutions of this nature in the comparative elegance of its accommodations. There were not at the time great numbers that required its advantages. The native population were generally well off, and had comfortable homes. However poor, they preferred to be taken care of at their own homes, and felt a prejudice against entering a hospital. The accommodations, therefore, were intended to give to a few in a superior style, everything which their comfort or well-doing demanded. The poor patient who entered was sure of receiving all the care and attention, and

of having everything done which would promote his cure, equally with the man of wealth.

In 1828, the "Boston Medical Journal" was commenced. The "New England Journal," before mentioned, had sustained its character from its foundation; but the professors whose aid had rendered it so valuable, had now become fully engaged in private practice, and were less able to contribute freely to a work of this character, or to take an active part in its conduct. It was thought also that a weekly publication, somewhat of the character of the London "Lancet," would be more acceptable. A weekly paper, "The Medical Intelligencer," had been in existence for some time, established or conducted by Dr. Coffin, and had a very good list of subscribers. The proprietorship was purchased, and the two journals were united; Dr. Warren taking charge of the editorship. He threw himself into this new labor with his usual energy, and exerted himself heart and soul to raise the work to the highest point of excellence. He caused the surgical records at the hospital to be kept more fully than before; and his selections from these formed a most valuable part of the new journal. It is difficult to understand, how he could devote the time which he did to this work, which might seem to afford almost sufficient occupation for one who had no other business.

Dr. Warren was now in the zenith of his medical career. He had an extensive private practice, medical as well as surgical; he was the leading surgical operator in New England. His labors in the temperance cause had recently commenced. The affairs of St. Paul's Church had a great share of his attention, beside other affairs.

He rose in winter and breakfasted by candlelight; and went out directly to visit his patients, until one o'clock, when he received patients at his house, until two. He devoted about ten minutes to his dinner; but after this meal, he rested for an hour or more. In the latter part of the afternoon, he visited such patients as required a second visit; took tea at seven; after which, he wrote and worked upon the sub-

jects above alluded to, often until two o'clock, A.M. The greater part of this time was devoted to the Medical Journal. He prepared the hospital records ; selected the extracts from foreign journals, and prepared original articles. The late hours which he kept at this time, doubtless, did serious injury to his eyesight.

A temperance society had been formed in Boston, in 1818, and the elder Dr. Warren was Vice-President. It, however, accomplished very little, and was in a languishing condition in 1827, when Dr. J. C. Warren was chosen President. He engaged earnestly in the cause. He prepared a series of resolutions, which were heartily adopted, and produced great effect upon the community. It was thought, at the time, that men could not work without their regular supply of ardent spirits ; and that their use was requisite to the health. The resolutions declared the contrary of this. Their influence was gradual ; but, with the continued labors of Dr. Warren and the society, a total reform in this respect was effected. The sale of intoxicating liquors upon the Common on public days, which had hitherto been days of riot and drunkenness, was prohibited, in consequence of a petition to the city government, headed by Dr. Warren.

The next step was to place greater restrictions upon the retailing of liquors, especially of those to be drank on the premises ; for grogshops were abundant in every street, and were places of riot and excess.

In all these labors, Dr. Warren was a prominent mover. He worked with so much zeal that he was sometimes accused of intemperance in the temperance cause ; and yet, he never advised extreme measures. His efforts were directed, at first, against the most prominent abuses, and against the habitual use of distilled liquors. The compounding of medicine had always received a large share of his attention. Dr. Warren now devoted himself to the substitution of other forms of medicines for the tinctures. These had always been freely used by both sexes. Many ladies thought they required their daily dose of "tincture of bark" or "Stoughton's elixir ;"

and men who were ashamed to resort to brandy or rum, took these substitutes. It was Dr. Warren's opinion, that their use occasioned an imaginary necessity for their continuance, and led eventually to the employment of spirits, and this to intemperance. His efforts so far succeeded that, in the course of a few years, an eminent apothecary declared that whereas prior to the commencement of the society's labors, his rows of bottles of tinctures were regularly filled every morning, they now were almost untouched, and hardly required filling once a month.

Dr. Warren always paid great attention to the subject of diet. In his younger days, he once recommended custard; and the lady, whose daughter was sick, requested directions as to the ingredients. It was Dr. Warren's maxim never to appear in doubt. "O," said he, "take some flour and eggs and milk and stir them together, and put in a little sugar." The lady knew how to make custards, but she had wanted directions how to make them in this particular case. Dr. Warren probably was never caught in a similar blunder. He paid great attention to articles of diet and their composition; and the skilful management of these, enabled him to dispense with a great deal of medicine. The Graham bread, or bread of unbolted flour, cracked wheat, &c., were introduced, upon his recommendation, as substitutes for cathartic drugs. He bestowed great attention also to the rendering medicines acceptable to the palate, and introduced many very elegant preparations. He was not inclined to assert that wholesome medicine is beneficial in precise proportion as it is nauseous. He acted upon the opposite principle, that, the less disagreeable to the palate, the better will be its effects.

Dr. Warren's caution in preparing himself to perform an operation has already been recorded. He introduced many new operations, which had not hitherto been performed in this country. His father had done successfully a great number of amputations, extirpations, and other operations, and had removed many cataracts; thus being successful in restoring sight to the blind, by an operation oftener done than done

with success. He had also repeatedly performed the operation of lithotomy; and on one occasion amputated at the shoulder joint, with complete success.

Dr. J. C. Warren first operated for strangulated hernia, and met with great opposition from the friends of the patient, and other medical men. Subsequently he performed it so often as to do it with very little anxiety, and he lost very few patients. He introduced the operation for aneurism, and performed it in numerous cases, all of which but two were successful. In one of these two, the patient had delirium tremens, and fell a victim to his imprudence.

In one case he extirpated the clavicle. The patient did well the first fortnight; but some imprudence caused his death. He performed the operation of removing the upper and lower jaw. One case of this is given in the first volume of the Boston Medical and Surgical Journal. Keeping his attention always on the alert, he introduced from abroad every new operation which was likely to be useful.

He says: "I have always considered it as my mission to introduce the as yet unknown science of Europe, rather than to attempt originality. Still, however, I believe no one has been more ready to propose and execute new and difficult operations, required by peculiar cases."

In 1837 he published his "Surgical Observations on Tumors," a thick octavo volume, with plates, giving principally the results of his own practice. He intended it, not as a complete and elaborate treatise, but rather as a collection of cases, intended to illustrate the distinctions between different tumors. He published this work on the eve of his departure for Europe, with his family.

He sailed for Liverpool, June 12, 1837, leaving his son, Dr. J. Mason Warren, in charge of his practice. While abroad, he neglected no opportunity in acquiring new information. He visited every hospital or other medical institution in places where he stopped in journeying; and he states that he rarely failed to derive something valuable from every one that he visited. One main object of this labor was to acquire

knowledge to be communicated in his lectures. In Paris, he went through a regular course of dissection, with a French surgeon.

On his return from Europe, Dr. Warren resumed his usual duties, his daily visits, hospital attendance, and lectures. As his son advanced in experience, and in the public confidence, Dr. Warren was able to devote more and more time to other objects of public usefulness.

He had engaged a friend to purchase an estate in Brookline, six miles from Boston, during his absence, and he found it ready for occupancy in the summer after his return. He became an active member of the Agricultural Society, and interested himself in the importation of foreign stock, to improve the breed of milch cows and cattle; also, in encouraging efforts to improve the breed of horses. He became an earnest member of the Society of Natural History, of which he was chosen President. Comparative anatomy had always been with him a favorite science, and from this he was led to the study of fossil remains.

In 1845, it was his good fortune to obtain the most perfect skeleton of the mastodon which exists. His work on the subject—first printed for private circulation, in an elegant quarto volume—but recently published, must be too well known to need description. Dr. Warren, having given his valuable museum of morbid anatomy to the Massachusetts Medical College, soon filled his house with a rare collection of fossil remains.

In 1854, he published a small work on Fossil Impressions; and in 1855, an interesting account of the Great Elm Tree on Boston Common.

In October, 1846, the introduction of ether gave a new impulse to operative surgery. He gives this account of its first introduction:

“The amount of what I know may be comprised in a few words. Dr. Jackson—Charles T.—suggested the use of ether to Dr. Morton, and Dr. Morton first employed it to prevent

pain from the extraction of teeth, and at his request I first used it in a surgical operation. Dr. Jackson has also stated to me that he advised Dr. Morton to apply to me to use it in a surgical operation."

Dr. Warren, with his usual circumspection, wished to pursue its use further, and give it a fair trial before making the discovery public. He was, however, anticipated. But fully convinced of its value, he gave it his sanction, and his well-known high reputation, both at home and abroad, insured it a fair trial. It was speedily adopted in the English hospitals, and Professor Simpson, of Edinburgh, entering warmly in its favor, made experiments with a view of discovering some other substance which might answer the ends, but be free from the disagreeable odor of ether. This he found in chloroform, and its quick operation and pleasant odor and effects insured it rapid success. Deaths, however, occurred from its use, and Dr. Warren set himself to ascertain if something might not be found superior to ether, but safer than chloroform. After many experiments with chloric ether, he adopted this preparation, and continued to use it in his operations."

In 1848, he published a small volume or tract on *Etherization*; and the subsequent year, one upon the "Effects of Chloroform and Strong Chloric Ether as Narcotic Agents." He strongly opposed the use of chloroform.

Dr. Warren continued to contribute frequently to the *Boston Medical Journal* and the *American Journal of Medical Sciences*, and also to supply verbal or written communications to the *Natural History Society*, the *American Academy of Arts and Sciences*, the *Medico-Chirurgical Transactions of London*, &c.

Dr. Warren's first wife died in May, 1841, leaving six children, most of whom were married, and his house was left solitary. He was married again, October, 1848, to the daughter of Governor Thomas L. Winthrop. She died December 17th, 1850.

The last paper, probably, which Dr. Warren contributed to any periodical, appeared in the *Boston Medical Journal*, for May, 1855. In the fall and winter of this year, though his

health for some time past had been seriously impaired, he still continued to practise; kept his usual hours for his various employments; visited a few patients, and even operated. He was now seventy-seven years of age. He devoted himself more than formerly to social enjoyment, and seemed to delight in collecting his family around him on such evenings as his other engagements did not prevent.

He continued in pretty good health till February, when he was seized with a slight ophthalmia, which he attributed to a sharp cold wind, and which caused him to send for Dr. Jackson. This seemed a slight affair, but it obliged him to keep his room darkened, and avoid out of door exercise as much as possible. From this confinement, and the accompanying depression, he became dyspeptic. He, however, continued to visit patients occasionally.

Subsequently he had two attacks of vertigo, followed by copious faecal discharges, from which he recovered within twenty-four hours. On the morning of the last attack, Dr. Jackson found him low and weak, but with no extraordinary symptoms of disease. The following day he was so much better that he rode out of town, and walked in his garden on the damp ground, an exposure unusual with him. In the evening he was attacked with chills and rigors, and had pains in the limbs, but especially in the abdomen. The next morning the sufferings were aggravated, and attended with the general symptoms of fever, with great tenderness in every part of the body. From this time his mind gradually failed, though he was at no period delirious. From three o'clock, P.M., on Saturday, one week from the commencement of the attack, he ceased to pay attention to those around him, and remained lying motionless until two o'clock Sunday morning, May 4th, 1856, when he ceased to breathe.

Dr. Jackson, who has given this account of his illness, thought that an examination would be very unlikely to show that the immediate cause of death was any local affection. He considered that distress of mind had accelerated his death. The loss of his first wife had been deeply felt, and that of his

second, when he was older and feebler, still more so. The ill health of his son in Europe also occasioned him great distress and anxiety.

Dr. Warren left ample materials for an extended memoir, which he directed by will to be prepared for publication within two years after death. It has recently appeared, in two octavo volumes.

EDWARD WARREN.

CHARLES FRICK.

1823—1860.

CHARLES FRICK was born at Baltimore, on the 8th day of August, 1823. His father, the Hon. William Frick, was a distinguished member of the Maryland bar, and, after filling several posts of prominence, was elected Judge of the Superior Court of Baltimore City, a position which he held at the time of his death, in 1855.

His early life was characterized by remarkable sweetness of temper, by a careful observance of the rights of his companions, by unusual quickness in the acquisition of knowledge, and by a spirit of self-abnegation and a forbearance towards the weak and unfortunate, which secured him the esteem and admiration of all who knew him. His classical and mathematical education was completed at Baltimore College, under President Prentiss, who was heard to say, a few years before his death, that he had been the cleverest boy he had ever had under his charge. After leaving college, he selected the profession of engineering, and was employed for a while, as an assistant, on the Baltimore and Ohio Railroad. In the spring of 1843, he began the study of medicine with his friend, Dr. Thomas H. Buckler, and in the ensuing autumn, attended a partial course of lectures in the University of Maryland. At the close of the session, he was admitted as a resident pupil into the hospital attached to the Baltimore City and County Almshouse, averaging about six hundred

inmates, with two hundred beds for the sick, and a lying-in department. Dr. Frick took the deepest interest in his cases, discussing, with his young colleagues, their diagnoses and treatment, and never failing to examine the bodies of those who died. He was the first to keep a daily record of the diseases as they were admitted, finding that it gave accuracy to his reports, while it improved his methodical habits, which were afterwards of great service to him.

Professor William Power, a brother-in-law of Dr. Frick, having several years previously returned from Paris, where he had been a favorite pupil of the great Louis, was the first to introduce a knowledge of auscultation into the practice in Baltimore. To this department, in the first instance, Mr. Frick's attention was attracted, and to acquire a familiar knowledge of it, he applied the zeal and energy always characteristic of him. The accuracy and beauty of this science warmed him into enthusiasm, and at hours when the other students thought they could sit and smoke together, he was often discovered wandering about from bed to bed, with stethoscope in hand, marking out the limits of the diseases of the heart and lungs. In this way, not unfrequently, he would ferret out, in the old chronic wards, some rasping murmur, or, perhaps, some heretofore unsuspected aneurism. To him, the house was never destitute of interest, even when others complained of the dulness of the wards; for his time and his thoughts were always employed in investigating disease. His talk was of medical cases, and his accurate ear, and, still more, his great attention, together with his power of discrimination and analysis, soon made him a fine auscultator. Yet he never hastily formed his opinions merely from physical signs, but gave them their due correlative value, when associated with the subjective symptoms; for he recognized the true principle that, by themselves, they were indications of physical conditions, and not of pathological lesions. The dead-house was to him a source of great interest, for his favorite authors were Louis, Andral, and Chomel, of the pathological school, all of whom taught him that descriptions of disease were

valueless, unless the daily details of their progress were carefully recorded, together with the post-mortem lesions, not merely of those organs that appeared to bear upon a particular point of their history, but of all of them, as minutely as the modes of examination then accessible permitted. When others would weary of the unpleasant work, Mr. Frick would remain, and try "to search for truth even to the centre," at the expense of any amount of time and trouble. When he left the Almshouse at the end of his year, he carried with him, besides a number of anatomical preparations, a large number of cases of a great variety of disease, hoarded up in the storehouse of his memory for future use.

We may be permitted here, at the close of his student's life, to allude to one point in Dr. Frick's character, which was true of him to the day of his death. He was of a social disposition, and having many warmly attached friends among the young men, was present at their numerous convivial entertainments, yet he never was known, at any time, to exceed moderation; he always knew where to stop. His judgment was never clouded, for although the jovial friend, and full of fun and merriment, yet he was always ready to attend to, what was with him of paramount importance, the calls of professional duty.

In March, 1845, he took the degree of Doctor of Medicine, in the same University where, twelve years subsequently, he was elevated to a professorship. His inaugural thesis was written on Puerperal Fever, and contained numerous cases which he had himself carefully observed. In this he manfully maintained its contagious character, and ably criticised Nunnely's view of its identity with erysipelas.

Dr. Frick's first article appeared in the April number of the American Journal of the Medical Sciences, 1846. It consisted of reports of cases of Remittent Fever made by Dr. Washington F. Anderson and himself, together with remarks by Dr. Alfred Stillé, of Philadelphia. Its value may be judged of from the fact that it has been extensively quoted in Bartlett's book on Fevers, and, indeed, in all systematic treatises in

which remittent fever is included, as an important contribution to our knowledge of its pathology. Louis' valuable treatise on Typhoid Fever had made its appearance in 1836, establishing the characteristic lesions of that disease. It had had the effect of attracting attention to other fevers, and Dr. Stewardson published, in 1841, his paper on the lesions of Remittent Fever, for the first time showing that the anatomical characteristic of the disease was the condition of the liver, which was enlarged with its consistence diminished, especially of the right lobe, and its color changed to that of a slate or bronze, the surface of a section being polished. Dr. Stewardson's cases were only nine in number, and Frick and Anderson's were eleven, with one of pneumonia, in a patient who had had remittent fever, from the pathological lesions of which he had not recovered.

The great value of these observations consisted in their confirming those of Dr. Stewardson, and establishing the fact of the uniformity of the softening of tissue of various organs, but especially of the liver, spleen, and heart. Thus we have had a point of pathology fixed, and material aid afforded to a clear classification of essential, idiopathic fevers.

Soon after graduating, Dr. Frick opened an office, in the spring of 1845, with his friend, Dr. Stedman R. Tilghman, whose talents for surgery gave great promise of usefulness and distinction. As is usually the case in large cities, these young practitioners made but little progress in the first two years, and Dr. Tilghman, having received an offer of the position of surgeon in one of the volunteer corps in the Mexican war, gladly accepted it. The climate of Mexico, and the hardships of the campaign overcame his once vigorous constitution, and he died the following summer. Dr. Frick patiently struggled on, and organized, with three of his friends, in the fall of 1847, the Maryland Medical Institute, a Preparatory School of medicine, he taking the department of Practical Medicine. This gave him occupation of a pleasant kind, and developed a talent for teaching, which, a few years later, made him a very acceptable professor.

M. Andral's little book on the blood, containing, as it did, his important researches as to its organic constituents, had given Dr. Frick, when but a student, a taste for animal chemistry, which soon ripened into a fondness for it. Moreover, with the fund of knowledge he had accumulated by his hard study and his year's experience in a large hospital, he yet felt the necessity for still further aids to diagnosis, and had a strong desire to dive deeper into the human currents. He therefore cultivated his knowledge of chemistry, in which, in fact, he had almost entirely educated himself, for he had had but little assistance from others.

In January, 1848, he published in the *American Journal of the Medical Sciences* the results of his analyses of the blood, which, as he stated, he had undertaken with no view of supporting any particular theory in regard to the chemical changes the blood undergoes in disease, but to determine its healthy composition as a standard formula, in order to be able to note any alterations which disease might effect, and thus prove of assistance in diagnosis or treatment. Although Andral had already done a great deal in ascertaining the changes disease produces in the organic elements, yet it seemed to him that there was an ample field in the study of the inorganic changes. This article of Dr. Frick gave him a place among the most distinguished medical writers of his time, and, in modern works on animal chemistry, these investigations are quoted side by side with those of Lehman, Becquerel, Rodier, and Simon. In Ancell's treatise on Tuberculosis, Dr. Frick's analyses of the organic and inorganic ingredients of the blood in that disease are given with minuteness and in detail.

The care and labor which he bestowed upon these analyses were very great. He systematically tabulated every ingredient, with all the concomitant or modifying circumstances, in one hundred and fifty cases, including many of the principal diseases, such as tubercular phthisis, idiopathic fevers, rheumatism, and anæmia. As evidence of his patient spirit in his investigations of scientific facts, and his perfect fairness in his deductions, it ought to be stated that in his conclusions he

rejected no less than seventy of these troublesome analyses, because there was some little point in the diagnosis or in the process which he considered as uncertain.

We cannot, of course, in the brief space occupied by this memoir, attempt to give a synopsis of this interesting paper; yet there are one or two results arrived at, which are so identified with the author's reputation, that we must call attention to them. In regard to the normal proportion of lime, soda, potash, and phosphoric acid, they were almost identical with those of Nasse and Enderlin. One curious fact established was that the quantity of the chlorides and phosphates of soda and potash is dependent, not upon the particular disease, but upon the season of the year in which the examination is made. Thus the average for these salts is much higher during the winter and spring months, than it is in the summer and fall. This fact he explains by the increased exhalations from the skin during warm weather. He asks if this does not correct the idea which had become prevalent, that there was a diminution of these salts in the essential fevers, which usually occur in the summer and fall. Andral had reported that in *purpura hæmorrhagica*, which he considered a kind of hemorrhage, the fibrine was diminished, and Franz Simon had found it reduced in one case as low as 0.905, but in Dr. Frick's analysis it was increased even as high as 4.204. Moreover, he states that the blood had not the peculiar dissolved appearance commonly described, but the clot and the serum were found to be perfectly separable, whereas, the red globules were diminished in each individual case, making the average considerably below that of health. In the same disease the proportion of the iron to the 127 parts of red globules was far above the normal quantity, the average being nearly one-half more. The chlorides and phosphates were also increased, while the amount of lime was diminished to less than one-half, the average being 0.082.

Dr. Frick's paper concludes with the remark, that "ultimate chemistry plays a most important part in the production of disease; and in unravelling the tangled web of pathological

hæmatology hereafter, its assistance must principally be relied on."

In this same year—1848,—in the October number of the "American Journal of Medical Science," Dr. Frick reported some cases of oxaluria, based upon Golding Bird's views that the oxalate of lime was not found in healthy urine. In 1857, he acknowledged, with a frankness characteristic of his noble nature, he was mistaken, and that, as it was a normal constituent, his cases were valueless.

In October, 1849, Dr. Frick was elected Attending Physician to the Maryland Penitentiary, a position which he filled for seven years. His yearly reports to the Trustees all contain data collected from observations of the effect of the confinement upon the inmates, which are of interest and value. He took the pains, after examining the convicts when admitted, to weigh them systematically every six months for years, carefully tabulating the results, in order to ascertain what they lost or gained in weight under the influence of their imprisonment, comparing the different occupations, diet, &c., upon both the whites and the blacks. He made the hygiene of the institution his especial study, and his practical suggestions were found to promote, in many ways, both the comfort and health of the inmates. As evidence of this, we find that of three hundred and eighty admissions, in the course of three years, only one case of tubercular phthisis had its origin within the prison.

Before Dr. Frick left the Almshouse, urinary pathology had become a favorite study with him, and he was pronounced a few years afterwards, by Professor John A. Swett, of New York, who had himself paid much attention to this class of diseases, as the most reliable authority in regard to them in the United States.

As the fruits of his labor in this field, previously so little explored, he published, in 1850, his volume on "Renal Diseases." He stated in his preface that his motive was to simplify the study of urinary pathology, and to make it attractive to others. This he admirably succeeded in, together with

giving to the medical public many valuable hints and some important truths. One great beauty of Dr. Frick's mind was that it was so well balanced that, with all his enthusiasm, he never had hobbies,—he did not over estimate the importance of any one set of symptoms. As proof of this, we call attention to the introduction to this volume, where he was decidedly in advance of others who had written on the same subject, when he urged his readers not to place too much confidence on the mere examination of the urine, either chemically or microscopically; claiming for it the same relative position that auscultation occupied in thoracic diseases, their signification to be interpreted by the other symptoms. Although this work was published ten years ago, a second edition could be rendered *au courant* by a few additions, such as his subsequent articles would readily furnish. It now stands on record as a valuable contribution, very creditable to its author, to a branch of pathology previously but little understood. There is one point, however, which, in justice to Dr. Frick's reputation, we cannot pass by unnoticed, because he had been entirely misunderstood by Golding Bird, who had represented dumb-bell crystals as composed of oxalate of lime, and afterwards of oxaluret of lime. Dr. Frick, in this book, and in an article in the "American Journal," in 1850, acknowledged a form of dumb-bell crystals of oxalate of lime; but stated that he had met with crystals of the dumb-bell shape of uric acid, especially at the period of disintegration of the ordinary rhomboid crystals. It is singular that Dr. Frick should have been misunderstood; for, both in his work and in the Journal article, he gave drawings from the field of the microscope, representing the process of the gradual formation of these uric acid dumb-bells. Dr. Frick's views on this point are now very generally adopted, and it is admitted that Golding Bird was entirely too exclusive on this point; for crystals of the same curious shape are sometimes met with, formed of urate of soda, and we also have seen them of carbonate of lime, of which Robin and Verdeil give

drawings, showing them more perfect in their angular form than when composed of oxalate of lime.

In July, 1852, in the "American Journal of Medical Sciences," will be found a report from Dr. Frick of some cases of diabetes mellitus, giving, in minute detail, the symptoms as they presented themselves, with carefully drawn-up tables, showing the influence of the various treatments upon the course of the disease, as well as that of the different diets, animal, farinaceous, and vegetable. This paper is valuable as confirmatory, by close clinical observation, of M. Bernard's view of the formation of sugar in the liver. So minutely and carefully is everything having any bearing, either upon the nature of the disease, its hygienic or therapeutical treatment, recorded in these cases, that it was spoken of to the writer of these pages by one of the most eminent medical authors of this country, as a model paper.

In October, 1853, Dr. Frick married Achsah Sargent, the eldest daughter of the Rev. Thomas B. Sargent, D.D., of Baltimore, a distinguished Methodist clergyman.

In June, 1854, he read before the Medical and Surgical Faculty of Maryland, at their annual meeting, a paper on the diuretic properties of different drugs, as shown by his experiments in no less than two thousand separate observations on the inmates of the prison. These were the average results obtained from the examination of a large number of cases taking the same remedy. Every precaution was taken by him to have the results accurate, by making allowance for the condition, age, and other controlling circumstances, in each case. Notwithstanding Becquerel and Bird's published works show that the quantity of fluid passed is no test, of itself, of the increased or diminished function of the kidneys; but that the quantity of the solid materials is the real test, yet the division of diuretics into two classes, the hydragogue and depurative, is generally completely ignored. In his paper, Dr. Frick draws particular attention to this distinction, insisting upon its importance, demonstrating that very frequently the extra amount of urine passed is owing to

the perspiratory functions being less active, or to the amount of water imbibed greater; whereas the number of grains of solid material represent the elements of the worn-out tissues and those substances which, although absorbed by the blood, subserve none of the purposes of nutrition, and therefore seek an outlet by the kidneys.

In these experiments, Dr. Frick arrived at some novel results. The sulphate of quinine, three grains, with sulphate of iron, one grain, was the most powerful diuretic, producing 57 fluid ounces, containing 1248 grains of solid material, 700 being the natural average. Next in value was juniper tea, causing discharge of 56 fluid ounces, with 1134 grains. Below these two came in order the prussiate of iron, sulphate of iron, and acetate of potash. Sweet spirits of nitre, generally considered so valuable as a diuretic, did not increase in the least the fluid, and the solids to a very slight extent, in fact only 782 grains. Morphia and strychnia decreased both the fluid and the solids.

In connection with urinary pathology, Dr. Frick tried to clear up the indefinite ideas generally prevalent, in regard to Bright's disease. In a paper read before the Baltimore Pathological Society, in 1855, and published among its transactions in the Virginia Medical Journal, and still later, in two clinical lectures published in the American Medical Monthly, of New York, he substantiates the general belief that the mere presence of albumen does not show, as the distinguished discoverer of the disease taught, that there is any Bright's disease; but that it may be owing to simple congestion, or to pressure, as in pregnancy, &c. Dr. Frick believed, with Jones and Sieveking, that a diseased state of the blood is the essential cause of renal degeneration, and that this consists in an abnormal state of the natural constituents, probably of the albumen or fibrine, which induces an unhealthy nutrition of the renal tissues. He made a broad distinction between the enlarged kidney from degenerative disease, and the contracted, granular kidney, resembling cirrhosis. Dr. Frick taught that the presence of fibrinous casts of the tubes containing spherical epithelium,

and sometimes blood corpuscles, indicate congestion or inflammation of the tubuli, and nothing else; but if these epithelial cells are enlarged, and their walls thickened, making them unusually opaque, if they are in sufficient quantity to block up the channel of the tubes, and, moreover, contain a certain quantity of oil-globules, we can have no doubt as to the nature of the disease. Equally important is it, when the casts are almost solid, containing more or less oil but no epithelium, showing that the epithelial cells have been already thrown off, and the nutrition of the part is incapable of forming them anew.

During these years that he was doing so much for the science, his reputation at home was gradually increasing his business as a practitioner, but not in proportion to his acknowledged merits. He was occasionally discouraged, but he knew if he persevered his success was inevitable; so, with a bold but patient spirit, he did persevere, all the time endeavoring to prepare himself the better to attend to the cure of disease, in all and any shape it might present itself. He had many resources with which to fill up his spare time profitably and pleasantly. Belonging to a family remarkable for their cultivated intelligence, he had early in life acquired a fondness for general literature, with an appreciative taste for the fine arts. The study of the natural sciences was very attractive to him, and he would have enjoyed spending much of his time upon them. Moreover, his social position gave him access to the most refined and educated of the community, and his cordial manners made him a welcome visitor. Although his profession was the first object with him, yet he thought it his duty to cultivate himself as a member of society. He followed the advice he gave to the graduating class, when he said, "You should bear in mind always that you are members of an intelligent and civilized society, and that, as such, you are bound to use all your abilities to multiply and diffuse the heaven-born blessings, which tend to adorn and dignify the social relation of man, and that constitute the greatest source of human happiness. Remember that the tendency of every pursuit is to give a certain narrowness to each individual's

mind, whereby he accords too great importance to his own occupation, and underrates all others. In your leisure moments, therefore, endeavor in a knowledge of the useful and elegant arts, and in the charms of polite literature, to enlarge those acquirements, which are common to all educated men."

During the years 1855 and 1856, Dr. Frick took a prominent part in the Baltimore Pathological Society. The proceedings of this society, as found in Dr. Van Bibber's reports in the Virginia Medical Journal, contain some valuable papers from his pen. In this association, consisting, besides men of his own date and age, of some of the older members of the profession in the city, he was looked up to and listened to with marked attention. In the discussions, especially on urinary pathology, he was eagerly appealed to as authority.

On the establishment, in 1856, of the Maryland College of Pharmacy, Dr. Frick was selected to fill the chair of *Materia Medica*. His accurate knowledge of his subject, and his peculiarly apt and impressive mode of imparting his information, soon established his reputation as a lecturer. For two years he taught with signal success. He had no small share in starting on a sure basis this college, organized to promote the standard of education among apothecaries.

In the summer of 1856, he made a tour of a few months in Europe, visiting, with interest and profit, the hospitals in Paris and in London. He could not but have been gratified at his cordial reception, by the great pathologists, Paget, Todd, Bence Jones, and Trousseau, particularly when he found that it was in consequence of their familiarity with his scientific papers, and their high appreciation of them. He speaks glowingly in his journal, of his enjoyment of the good and the beautiful in art and in nature, which he met with in his travels; but that which particularly attracted his attention, and had most beauty in his eyes, was anything connected with his favorite study. August 31st, he says: "I have never seen anything so beautiful as the Alpine Flora; on every side, quantities of aconite with its tall spike of blue hoods, the delicate little campanella with its bell-shaped cup, and the 'modest blue

gentian' skirting the glaciers. And throughout Switzerland, I met with quantities of colchicum." Everywhere he kept in view his lectureship, as was shown from his bringing home with him, a number of rare specimens of *materia medica* he had collected as he went along.

On returning from Europe Dr. Frick recommenced his private practice with his accustomed energy and activity. Already his name had been mentioned in other schools of medicine, and he had been written to about them; but he would not consent, even to be offered a professorship elsewhere, for he considered himself as permanently moored in Baltimore; and we question whether the most lucrative chair in the country could have enticed him away. His friendships and social connections were very strong, and he did not think a man could be a good teacher of medicine unless he was an active practitioner, daily meeting with the trials as well as successes necessarily attendant upon such a life. Dr. Frick thought that it would be indelicate in him to apply for a place in the school of medicine of his own city, particularly when the faculty, composed as it was entirely of medical men, had the selection. His high-toned sense shrank from such obtrusiveness. But this was unnecessary, for, as another friend of his has expressed it, "in 1858 a vacancy occurred in the faculty of the University of Maryland, whereupon all eyes were turned towards Dr. Frick, as the man above all others in the medical profession of our city, whose entire fitness for the chair was pre-eminent and undeniable; and when the faculty, in verification of the universally expressed opinion, elevated him to the professorship of *Materia Medica* and Therapeutics, most hearty congratulations were offered, as well to the new Professor as to his colleagues; and the most confident predictions were uttered as to his success as a teacher, and the considerable part he was likely to take in extending the usefulness and reputation of the institution."

Immediately on being appointed to the professorship, he took charge of the medical department of the Baltimore Infirmary, as visiting physician. This was, perhaps, to him, the

most attractive part of his new field, because, to render his general course of lectures complete, he would be obliged to include much of traditional teaching in regard to the action of remedies, about which he was by no means satisfied; although he endeavored, as far as possible, to guard against the excessive use of drugs, and a too great reliance upon them, without attending to the hygienic management, such as the regimen and the nursing, upon which he laid much stress. At the hospital, with cases of intricate disease to investigate, he was perfectly at home; and he had an opportunity of practically testing the value of the remedies of which he spoke at the University. His great familiarity with all the modern modes of searching into morbid phenomena, his being an expert auscultator, a fine analytical chemist, and his dexterity in the use of the microscope, and, above all, his patient, unwearying industry, made him a remarkably accurate diagnostician. This, of itself, fixed the attention and excited the admiration of a large class of students, who followed his daily visits. He was willing and anxious to impart his knowledge, and spared no pains to render all clear to them. His uniform kindness attached them to his person, and his perfect frankness in regard to his opinions, confessing, as he always did, when he was in doubt, or when he had made an erroneous diagnosis, gave them great confidence in his judgment.

As a lecturer he was equally fortunate. He was listened to with marked attention, and even when speaking of dry details of the drugs themselves, he made his subject one of interest to them. In reading over his lectures, we find scattered through them many original views based upon his own observation, and had we the space, we would like to make extracts of the most valuable. In regard to the medical controversies of his day, Dr. Frick did not hesitate to express his opinions as he had matured them. Of that in relation to bloodletting, he did not disbelieve that it was sometimes useful in pneumonia and other inflammatory diseases, but he taught that it was inadmissible in any other than the forming stage of the disease, and even then only with a view of reliev-

ing the pressing dyspnoea, when it was to be resorted to with great caution, on account of its depriving the blood of its red globules, essential to its nutritive functions. In the important change visible everywhere in the treatment of inflammations, he did not deny the theory of Watson and others, that there had been a change of type of disease, but, to use his own words, "one great cause of the change in regard to active treatment, including venesection, is the better observation of diseases, their progress, and the results of remedies upon them."

In 1858, Dr. Frick made a report to the Pathological Society, containing his interesting investigations in regard to vaccination and revaccination. The whole number of revaccinations observed by him was six hundred and twelve. Vaccinia being acknowledged now as variola reduced to its minimum, it is curious that, whereas in the latter the percentage of persons taking it twice is only five per cent., in the former Dr. Frick found the percentage of successful revaccinations in private practice was thirty-one per cent., and in the prison twenty-one per cent. He found that the susceptibility of individuals to vaccination was not modified by age; and, what was still more curious, that the percentage of successful revaccinations was not greater as the years increased. So he concluded, not only that there was no particular age at which individuals are most liable to successful revaccination, but that the protection vaccine virus affords, contrary to the received impression, does not diminish by time, but is modified by the peculiarities of the individual's constitution, which can only be ascertained by experiment.

We do not feel justified in concluding this memoir without speaking of, perhaps, the most suggestive of Dr. Frick's productions,—his essay on the "Formation of Urinary Calculi," published in the American Medical Monthly, of New York, in April, 1858. He frankly acknowledges the error he had fallen into, or, more properly speaking, had been led into, by Golding Bird, and other urinary pathologists, of explaining and naming diseases in accordance with the nature and quantity of the various substances contained in the urine. He

there states emphatically, "that the distinction into the uric, oxalic, and phosphatic diatheses, is no longer tenable."

As to the origin of urea, the most important ingredient, in a physiological point of view, of the whole urinary secretion, Dr. Frick was led by his own investigations to differ from Liebig and Bischoff, who maintained that it was derived entirely from the metamorphosis of the nitrogenous tissues, and to agree with Lehmann and Schmidt, in admitting this source, but asserting that, in addition, the quantity is increased by the ingesta of nitrogenous food. The immediate formation of urea he believed, with Liebig and Dr. William A. Hammond, to be from the oxidation of uric acid, which he considered a substance one degree higher in the scale of descending metamorphosis of matter. Dr. Frick acknowledges that uric acid is a normal constituent of the blood, and that in acute and chronic gout there is always an abnormal quantity present, whereas, in rheumatism, the reverse is the case, the excess being in the urine, and the deficiency in the blood. To do Dr. Frick's views justice on this important point, we feel we ought to quote his own clear and expressive words: "But it is important to know that a deposit of this acid or its salts does not always occur because there is an excess. Indeed, such is never the case from excess alone. To be excreted from the blood at all, it must be in solution, and as it is then removed from the laws of vitality, and free to be influenced by chemical reaction alone, the cause of deposition whilst in the urinary passages must be looked for either in the composition of the urine itself, or in the condition of the membrane over which it passes. The forms in which this substance is found to exist as a deposit are urate of soda, urate of ammonia, and, now more rarely, urate of lime. Now, ammonia, as is well known, is not a constituent of healthy urine, but results from decomposition of the urea, either before or after emission. The existence, therefore, of urate of ammonia implies that decomposition has taken place after secretion. This decomposition is more likely to occur in the bladder than elsewhere; and hence, calculi of urate of ammonia should be most commonly

found in this viscus. Such is really the case. Urate of soda, on the other hand, is the normal condition in which uric acid exists in solution; and if ammonia alone be produced by decomposition, the urate will be found in this form. Again: if, from decomposition, a stronger acid than the uric be developed, this acid will unite with the soda, the result will be a deposit of uric acid alone. It is exceedingly rare for urine, on its emission, to contain free uric acid or urates as a deposit. It is apparently so, for these changes are produced in a short time from the metamorphosis of the pigment into lactic acid, and sometimes also acetic acid, by the influence of the mucus of the urinary passages." This he imputes to what Sherer had called "acid urinary fermentation." The ferment can easily be removed by boiling fresh urine, by adding alcohol to it, or, still better, by filtering it. This fermentation can take place either out of the bladder or before it is voided.

For this reason, Dr. Frick could no longer recognize a uric acid diathesis, inasmuch as the increased amount is simply due to a departure from ordinary physiological laws; and the deposit, to changes taking place in effete organic matter. In the same way, phosphoric acid, being a normal constituent of urine, is derived from the blood, and the amount is increased only in one class of diseases, and that is inflammation of the brain itself, it being a phosphorized tissue. Thus there is no ground for the phosphatic diathesis theory. Dr. Frick calls attention here to the fact how exceedingly common it is to find the phosphates in the urine of persons who, from paralysis or other causes, have lost the ability to empty their bladder, or who have chronic inflammation of this organ. In this latter case, an undue amount of altered mucus is secreted, which, acting as a ferment upon the urea, produces, as a result ammonia, by which the acid reaction of the urine is removed, and the phosphates at the same time deposited. We must, therefore, look for the causes of phosphatic calculi almost entirely in the bladder itself, renal calculi being nearly exclusively of oxalate of lime and uric acid. In regard to oxalate of lime, Lehmann had shown it to be an ingredient of

healthy urine, by exposing it out of doors to a temperature just below 32° Fahr., by which means the water alone freezes; the urine concentrates slowly, and the crystals are found in the deposit, in the form of octahedra.

These chief constituents of calculi, uric acid, the phosphates and oxalate of lime, being healthy constituents of the urine, a deposit of any one of them by no means proves it is in excess. It may even be coincident with a diminution, and therefore it is fair to conclude, with Dr. Frick, that these diatheses, as they were called, do not really exist. Having established this point, he shows that calculi are most common in England, Holland, and in the northwestern part of France, where there is a great humidity of the air. This unusual amount of vapor in the atmosphere has the indirect effect, as is familiarly known as to the bronchi, of irritating the mucous passages generally, and of those of the urinary organs in particular, by interfering with the normal action of the skin, and thus giving the kidneys extra duty, and altering the mucous epithelium either in quantity or quality. Moreover, analyses have shown other facts having an important bearing upon this point. For we now know that these calculi contain much animal matter, sometimes as nuclei, in the shape of clots of blood, mucus, or epithelium; and calculi are frequently met with where there has been stricture of the urethra, disease of the prostate, and organic disease of the kidneys, ureter, and bladder. Then again, it has been long observed that foreign substances in the bladder act almost invariably the part of nuclei of calculi.

These facts all appear to render Dr. Frick's views correct, in attributing to morbid secretions, whether blood, albumen, or epithelial, resulting from chronic or acute irritation of the bladder, the credit of the formation of calculi, and not, as has been heretofore supposed, to the composition of the urine. Such being the case, in order to prevent their formation or re-formation, he advises that the remedies be addressed to the urinary passages themselves, and not to their secretions.

This article shows how unwilling he was to grope on in the dark, taking for granted what other men had written. He

thus searches after truth, and throws valuable light upon important points in pathology.

Dr. Frick's last publication was one made by his class, being his lecture on Diuretics. It is a clear exposition of his views on the action of a class of remedies which he had thoroughly studied. It is scientific, yet very practical.

We have thus traced, step by step, Dr. Frick's career, short in duration, but valuable in its results to science. Our motive has been to do justice to his talents and his labors; and to leave on record, for those who follow him, his bright example, demonstrating how much can be accomplished by persevering industry and unwavering adherence to high principle and truth.

For a due appreciation of the force of Dr. Frick's character, it ought to be known that, from the moment of his commencing his medical studies to the time of his receiving the appointment at the University, he was struggling under the depressing influence of pecuniary embarrassment. His proud spirit was almost broken from feeling so acutely the sting of temporary obligation from even his own brothers; yet he never flagged in the study and investigation of truth. Nor could offers, which we know were made to him, to go into business of a very lucrative kind, tempt him to abandon the profession of his choice and of his affections.

Before concluding this narrative with the last sad and painful scenes of his life, we must be allowed to speak of the high estimate in which he was held in his native city, by his professional brethren. He was considered, not only as occupying an eminent position in science, but as destined to be a prominent practitioner; for, with all his high scientific attainments, he was exceedingly practical, and his investigations had a direct bearing upon practical medicine. He was looked up to with reverence by the men of his own date; and, over the younger men, he had unbounded influence. His elders in medicine had already learned his value, and were availing themselves of his knowledge in consultations.

He was acknowledged to be the very man for the times, in

which a great revolutionary movement was going on in medical doctrines, when some were disposed, in the reaction from polypharmacy, to go to the other extreme, and become skeptical of the value of therapeutical agents. He was not credulous, but he did not permit his incredulity to shake his belief in all medication. He was not willing to be led by tradition in medical science, but he was ready to trust the statements of others, when they were based upon reliable experiments. He had, it is true, very little confidence in the mere dicta of men, however eminent, because no one knew better than he did, upon how loose and unscientific foundations the reputation of drugs had often commenced. He was conservative in the true sense of the word. He was for preserving the truly valuable of the old in medicine, and only in favor of the new, when it was the growth of healthful progress. With all his enthusiasm, he was deliberate in the formation of his opinions, and never intolerant of those who differed from him. As a practitioner, he was highly esteemed, for he was sympathizing, kind, and attentive. He was thorough in his examinations, and careful and watchful in his treatment.

Dr. Frick had been connected with the University for two years with entire satisfaction to all parties, and as he advanced in reputation and in practice, he devoted himself with increased energy to the acquisition of knowledge. He seemed about to reap the fruit of all his labor, and to have his patience rewarded by a success in life, of which he might have been proud. He was attending to the active duties of his noble avocation, cheered by his present prosperous state, and buoyant with bright hopes of the future. He was the pride of his friends, and the ornament of his profession. On Tuesday, 20th day of March, 1860, he performed, at the Infirmary, the operation of tracheotomy upon a negro woman who was sinking from epidemic diphtheria. From early childhood, he had shown peculiar susceptibility to idiopathic poisons. He never attended a case of scarlet fever that he did not suffer with his throat. So in this instance, in attempting to save the life of this poor creature, he, apparently at least, inhaled

the poison, and the next day he complained of some soreness about his throat, notwithstanding which, in the afternoon, he went to the funeral of a friend, and stood in the graveyard on the damp ground, with his head uncovered, when there was blowing a chilling March wind. That night he had a severe chill, with increased swelling and pain about the throat, and the next morning—Thursday,—when his uncle and friend, Dr. John Buckler, was called to him, already the foul disease had taken a firm hold upon him, and the membrane characteristic of diphtheria was forming. From this time, his sufferings became very acute, and the disease advanced in malignancy, notwithstanding both Dr. Buckler and Professor George W. Miltenberger brought to bear all the resources of the art, with the skill for which they are so distinguished. The agony in deglutition was so great that it was almost impossible for him to accomplish it. Friday and Saturday were days of intense suffering. He went from chair to chair, from bed to lounge, wandering about the room, trying every position that might bring breath, and, with it, ease. His frame was worn out, for since Tuesday night he had no sleep, and could get none. Saturday evening the dark shadow of the result was unmistakable, from his cold, cyanosed cutaneous surface and his depressed pulse. His physicians decided that tracheotomy could not benefit him, for he was sinking, not from mechanical trouble in his larynx, but from the depressing influence of the poison itself upon his whole system. He was aware of this, yet he himself urged it, saying that it would afford him some temporary relief. They reluctantly consented, and the operation was performed, and after it, all were rejoiced they had yielded to his entreaties, for it enabled him to take a refreshing sleep. But this with all else that was done for him, was of no real avail, for he gradually sank, and his pure, noble spirit fled on Sunday, 25th March, 1860.

Those who were with him that last night of suffering can never forget it. But still more indelibly is there impressed upon their memories the calm, manly courage with which he met the approach of death, of which he was perfectly aware.

His beautiful submission to God's will and his fortitude were worthy of the Christian. "Never," said Dr. Buckler, "never shall I forget the manner in which he arose from his bed, seated himself in the chair, directed how the light should be placed so as to cast no shadow on the hand of the operator, handed the bistoury, and placing his finger on the spot, threw back his head with a courage perfectly heroic." He died with his devoted wife by his side, surrounded by mother, sister, and brothers, and in the arms of a friend, whom he had summoned that night to his dying bed, and who loved him as a brother.

Such a noble spirit could not pass away, without leaving a sad vacancy in the hearts of many in the city, where he had spent his life in doing good. The news of his death spread a gloom throughout the city. At his funeral, a large number of the physicians attended; the medical students walked in a body to his grave, and many were the mourners among his friends and patients. The daily papers gave expression to the universal sorrow in the community, and a general meeting of the profession was called, for the first time for many years for such a purpose. Their resolutions, laudatory as they were of his virtues, and expressive as they were of the sense of the loss the science of medicine had sustained, but told the simple truth. The speeches exhibited the deep feeling everywhere shown at his death, as well as the high appreciation in which he was held. The proceedings of this meeting, together with the remarks that were made, were printed, and extensively circulated among his friends and in the profession.

His death in his thirty-seventh year, although deeply regretted, was not untimely, for he had completed the work his Father had given him to do, and had done it well. He has left his mark, his impress upon his generation. Young as he was in years, he was eminent in science, skilful in his art, high in the esteem of all who knew him, and his memory is cherished in the hearts of the many who loved him.

F. DONALDSON.

CPSIA information can be obtained at www.ICGtesting.com
Printed in the USA
BVOW09s1707090915

417282BV00008B/207/P



9 781163 2529

DBJ462733



ISBN 9781163252994



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